MEETING

STATE OF CALIFORNIA

LANDS COMMISSION

PERFORMING ARTS & CONVENTION CENTER

THE OXNARD ROOM

800 HOBSON WAY

OXNARD, CALIFORNIA

MONDAY, APRIL 9, 2007 10:20 A.M.

JAMES F. PETERS, CSR, RPR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 10063 ii

APPEARANCES

BOARD MEMBERS

- Mr. John Garamendi, Lieutenant Governor, Chairperson
- Mr. John Chiang, State Controller
- Mr. Michael Genest, Director of Finance, represented by
- Ms. Anne Sheehan

STAFF

- Mr. Paul Thayer, Executive Officer
- Mr. Jack Rump, Chief Counsel
- Ms. Barbara Dugal, Chief, Land Management Division
- Mr. Curt Fossum, Assistant Chief Counsel
- Ms. Mary Hays, Manager, Division of Land Management
- Ms. Kimberly Lunetta, Executive Assistant
- Mr. Mark Meier, Senior Staff Counsel
- Mr. Dwight Sanders, Chief, Division of Environmental Planning and Management

ATTORNEY GENERAL

- Ms. Danae Aitchison, Deputy Attorney General
- Mr. Alan Hager, Deputy Attorney General
- Ms. Marian Moe, Deputy Attorney General

ALSO PRESENT

- Ms. Sarah Abramson, Health The Bay
- Mr. Nathan Alley, Environmental Defense Center
- Ms. Lupe Anguiano

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APPEARANCES CONTINUED

ALSO PRESENT

- Mr. Richard Baldwin, Air Quality Consultant, BHP Billiton
- Mr. Russ Baggerly
- Mr. Steve Bennett, Ventura County Board of Supervisors
- Mr. R. Cameron Benson, Environmental Defense Center
- Ms. Luz Bernardino, Centro Mujer
- Mr. Paul Betouliere
- Mr. Gordon Birr, Beacon Foundation
- Ms. Janet Bridges, Earth Alert
- Ms. Keely Brosnan
- Mr. Pierce Brosnan, representing Jean Michel Cousteau
- Assemblymember Julia Brownley
- Mr. Barbara Burnett
- Ms. Linda Gray Calderon
- Mr. Andy Caldwell, COLAB
- Congresswoman Lois Capps
- Mr. Danny Carrilo, SEIU 721
- Mr. Edward Castillo
- Mr. Anthony Chavez
- Ms. Maureen Christopher, Hospice Chaplain
- Mr. Chris Coudert
- Mr. Rory Cox, Pacific Environment
- Dr. Bonnie Dean
- Dr. Alessandra DeClario

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APPEARANCES CONTINUED

ALSO PRESENT

- Mr. Mike DeMartino
- Mr. Wayne Dey
- Ms. Mary Dodd
- Ms. Lauraine Effress
- Mr. Conner Everts, Surfrider Foundation
- Mr. Don Facciano, Ventura County Taxpayers Association
- Ms. Erica Fernandez, Student, Hueneme High School
- Mr. Steve Fleischer
- Mr. Robert Fletcher, California Air Resources Board
- Mr. Mark Flores, Airsheet Innovation R&D LLC
- Mr. John Flynn, Ventura County Supervisor
- Mr. Timothy Flynn, Oxnard City Councilmember
- Mr. David Follin
- Mr. Alez Garcia
- Ms. Hilda Garcia, representing Senator Sheila Kuehl
- Mr. Frank Gavaller
- Mr. Ed Gillespie, Malibu Chamber of Commerce
- Dr. Mortimer Glasgal
- Mr. Larry Godwin
- Ms. Shirley Godwin
- Lieutenant Commander Peter Gooding, United States Coast Guard
- Mr. David Gottlieb, Resource Conservation District of the Santa Monica Mountains

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APPEARANCES CONTINUED

ALSO PRESENT

- Mr. Barry Halderman
- Mr. Bob Handy
- Ms. Jean Harris, Saviers Road Design Team
- Dr. Jeff Harris
- Mr. David Harvey
- Mr. John C. Hazeltine
- Ms. Ellen Bougher Harvey
- Mr. Peter Hearst
- Mr. Richard Heede, Climiate Mitigation Services
- Mr. Jim Hensley, Greater Oxnard Organization of Democrats
- Mr. Kraig Hill
- Dr. Tom Holden, Mayor, City of Oxnard
- Ms. Laura Holtz
- Mr. Jerome Hopkins
- Ms. September Hopper, Environmental Defense Center
- Ms. Cara Horowitz, Natural Resources Defense Council
- Mr. David Howekamp, California Coastal Protection Network
- Mr. Eugene Hubbard
- Mr. Tam Hunt, Community Environmental Council
- Ms. Clarissa Job
- Ms. Susan Jordan, California Coastal Protection Network
- Mr. Rachel Roderick Jones
- Ms. Cheryl Karpowicz, Ecology and Environment

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APPEARANCES CONTINUED

ALSO PRESENT

- Mr. Heikki Ketola, Santa Monica Software
- Mr. Paul Kowalski, Tide Power Organization
- Dr. Walt Keller
- Ms. Christine Kemp, Ariach, LTD
- Ms. Renee Klimczak, BHP Billiton
- Mr. Karen Kraus, Environmental Defense Center
- Ms. Linda Krop, Environmental Defense Center
- Ms. Karol Kurtz
- Mr. Hank Lecayo, Congress of California Seniors
- Ms. Danusia Larsen
- Ms. Ann Gist Levin
- Ms. Nancy L. Lindholm, Oxnard Chamber of Commerce
- Mr. Chung Liu, South Coast Air Quality Management District
- Dr. Manuel Lopez, Former Mayor, City of Oxnard
- Ms. Loretta Lynch, Pacific Environment
- Ms. Barbara Macri-Ortiz
- Ms. Alice Madrid, Ocean View School District
- Dr. Matthew Margulies
- Mr. David Maron, Maron Computer Services
- Mr. Mark Massara, Sierra Club
- Mr. John Mazza, Mailbu Township Council
- Ms. Mary McClenning
- Mr. Jim McComb

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APPEARANCES CONTINUED

ALSO PRESENT

- Ms. Shannon McComb
- Mr. Bill Meeker
- Mr. James A. Merrill
- Mr. Jeremy Meyer, Humanity's Team of Ventura County
- Ms. Deborah Meyer-Morris, Oxnard School District
- Ms. Kathleen Misewitch, Port Hueneme Chamber of Commerce
- Ms. Maricela Morales, Mayor, Port Hueneme
- Ms. Bailey Morris, Student
- Mr. Craig Moyer, Manatt, Phelps & Phillips
- Ms. Trisha Munro
- Ms. Herlinda Murguia
- Mr. Jack Nicholl, American Lung Association
- Mr. George Niznik
- Mr. Denis O'Leary, Board Member, Oxnard School District
- Mr. Alison Ayers O'Neill
- Mr. Joseph O'Neill
- Ms. Fran Pavley, Assemblymember(Ret.)
- Ms. Nancy Pedersen
- Ms. Maree Penhart
- Mr. Pat Perez, California Energy Commission
- Mr. John Pinard
- Mr. Raymond Pinedo, Santa Paula High School
- Mr. Shiva Polefka, Environmental Defense Center

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APPEARANCES CONTINUED

ALSO PRESENT

- Mr. Bill Powers, Ratepayers for Affordable Clean Energy
- Ms. Leslie Purcell
- Ms. Carmen Ramirez, CAUSE
- Ms. Irene Rauschenberger
- Ms. Anne Ready
- Mr. Will Reed, Santa Barbara Hispanic Chamber of Commerce
- Mr. Tim Riley
- Ms. Christine Rogerson, Malibu Association of Realtors
- Ms. Gloria Roman
- Mr. Francisco Romero
- Mr. Murray Rosenbluth, Port Hueneme City Councilmember
- Ms. Jean Rountree, The Beacon Foundation
- Mr. Alan Salazar
- Ms. Josie Salinas
- Mr. Al Sanders, Ormond Beach Observers
- Ms. Cynthia Scott, representing Los Angeles County Board of Supervisor Zev Yaroslavsky
- Mr. Dennis Seider, Latigo Cove Homeowner's Civic Association
- Mr. Tony Skinner, TriCounties Building and Construction Trades
- Ms. Terri Smith
- Mr. Trevor Smith, Los Padres Chapter, Sierra Club
- Mr. Kenneth Smokoska, Energy/Climate Change, Sierra Club of California

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APPEARANCES CONTINUED

ALSO PRESENT

- Ms. Natalie Soloway, MAR
- Ms. Dineane Sperske
- Mr. Larry Stein
- Mr. Andy Stern, Malibu City Councilmember
- Mr. Michael Stubblefield, Los Padres Chapeter, Sierra Club
- Mr. Scott Tallal, Trancas Highlands Homeowners Association
- Mr. William Terry
- Ms. Jane M. Tohmach
- Mr. Jesus Torres, representing Assemblymember Pedro Nava
- Ms. Eileen Tracy
- Ms. Pamela Conley Ulich, Malibu City Councilmember
- $\operatorname{Mr.}$ Stuart Waldman, representing Assemblymember Lloyd Levine
- Mr. Michael White
- Mr. Allan Widmeyer
- Ms. Celia Williams, Environmental Defense Center
- Mr. Innes Willox, Consul-General, Australian Consulate-General
- Mr. Damon Wing, representing Ventura County Supervisor Linda Parks
- Dr. Andrew Wolford, Risknology
- Mr. Tom Wood, Air Quality Consultant, BHP Billiton
- Ms. Donna Worley
- Mr. Jim Yarbrough
- Ms. Kathryn Yarnell, Malibu Business Roundtable

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PROCEEDINGS

- 2 COMMISSIONER CHIANG: Good morning. If I could
- 3 have everyone's attention. Thank you very much. I'd call
- 4 this meeting of the State Lands Commission to order. All
- 5 the representatives of the Commission are here or will
- 6 sooner be here. I am John Chiang, California State
- 7 Controller and am joined by Anne Sheehan who represents
- 8 the Department of Finance. We'll be joined shortly by
- 9 Lieutenant Governor John Garamendi.
- 10 For the benefit of those in the audience, the
- 11 State Lands Commission administers properties owned by the
- 12 State. Today we will hear proposals concerning the
- 13 leasing and management of these public properties as they
- 14 relate to a potential LNG terminal project. The first
- 15 item of business will be the adoption of the minutes from
- 16 the Commission's last meeting. May I have a motion to
- 17 approve the minutes?
- 18 ACTING COMMISSIONER SHEEHAN: Yes. So moved.
- 19 COMMISSIONER CHIANG: We have a motion and a
- 20 second. Without objection, the motion passes. The
- 21 minutes are unanimously adopted.
- The next order of business is the Executive
- 23 Officer's report. Mr. Thayer, may I have your report.
- 24 EXECUTIVE OFFICER THAYER: Thank you, Mr. Chiang.
- The executive officer has no report this morning.

1 COMMISSIONER CHIANG: The next order of business

- 2 will be the adoption of the consent calendar. I call on
- 3 our Executive Officer, Paul Thayer, to indicate if there's
- 4 any change to the consent calendar.
- 5 EXECUTIVE OFFICER THAYER: No, the item is as
- 6 prepared in the Commissioners' binders.
- 7 COMMISSIONER CHIANG: Okay. Is there anyone in
- 8 the audience who wishes to speak on this item on the
- 9 consent calendar?
- 10 If not, it will be taken up for a vote.
- 11 Anyone wish to speak on this item?
- 12 No. Okay. Is there a motion?
- 13 ACTING COMMISSIONER SHEEHAN: Yeah. I'll move
- 14 the consent calendar.
- 15 COMMISSIONER CHIANG: We have a motion.
- 16 Is there a second?
- 17 CHAIRPERSON GARAMENDI: Second.
- 18 COMMISSIONER CHIANG: Without objection the
- 19 motion passes.
- 20 We will now turn to the regular calendar Item CO2
- 21 BHP Billiton concerning the environmental documents and
- 22 application for a lease for the Cabrillo Port Liquefied
- 23 Natural Gas Deepwater Port. May we have a staff
- 24 presentation, please.
- 25 EXECUTIVE OFFICER THAYER: Thank you, Mr.

1 Controller. The staff presentation will start with Dwight

- 2 Sanders. It will last probably about 35 minutes. We'll
- 3 include testimony from Commission staff, from the
- 4 consultant who prepared the EIR, some of the experts that
- 5 worked on that EIR and then finally representatives from
- 6 the Energy Commission and the Air Resources Board will
- 7 also speak.
- 8 But Dwight Sanders our Division Chief for Land
- 9 Management -- excuse me, for Environmental Review will
- 10 start the presentation. I should note that this is
- 11 probably Dwight's last meeting as he's in the process of
- 12 retiring. This is his final project.
- 13 (Laughter.)
- 14 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION
- 15 CHIEF SANDERS: What a way to go, huh, folks?
- 16 (Laughter.)
- 17 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION
- 18 CHIEF SANDERS: Thank you, Paul. And, in fact,
- 19 Paul, as any good executive officer, preempted the staff
- 20 in the presentation.
- 21 But let me just advise you, Mr. Chairman and
- 22 Commissioners that our presentation this morning will have
- 23 several components that are built around the issues that
- 24 have been prevalent in the analysis and review of this
- 25 particular project.

1 And specifically, the first speaker will be Ms.

- 2 Cheryl Karpowicz who is with the firm of Ecology and
- 3 Environment who are under contract with the State Lands
- 4 Commission and assisted us and the U.S. Coast Guard and
- 5 Maritime Administration in preparation of the joint
- 6 EIS/EIR.
- 7 Cheryl will be covering the major environmental
- 8 process that has been conducted for this particular
- 9 project and some of the remaining issues of which you are
- 10 now aware as elucidated in our staff report.
- 11 Next, after Cheryl, will be Mr. Andy Wolford.
- 12 Andy was the project manager for the Independent Risk
- 13 Assessment and focused primarily on the public safety
- 14 aspects of this particular project. And as a subset of
- 15 that presentation, we have asked Lieutenant Commander Pete
- 16 Gooding of the United States Coast Guard to provide the
- 17 Commission a context of their role in safety and security
- 18 for a project of this nature.
- 19 Next will be Mr. Bob Fletcher from the California
- 20 Air Resources Board, who we've asked to provide an
- 21 overview of CARB's role and responsibilities with respect
- 22 to this project and their involvement within the
- 23 environmental process.
- 24 Next to provide the Commission with a context of
- 25 the energy picture that plays into the evaluation of the

1 project of this nature will be Mr. Pat Perez, or Perez

- 2 rather, excuse me, who is with the California Energy
- 3 Commission.
- 4 And last, but certainly not least, will be Mary
- 5 Hays of the Commission's Division of Land Management who
- 6 will provide an overview of some of the key lease
- 7 provisions that are contained within the proposed lease,
- 8 in particular security arrangements and bonds and so
- 9 forth.
- 10 So with that introduction, I would like to
- 11 request, Cheryl, if you would begin for us, please.
- MS. KARPOWICZ: Thank you, Dwight.
- May I have the first slide, please
- 14 (Thereupon an overhead presentation was
- 15 Presented as follows.)
- MS. KARPOWICZ: Okay, it looks like we have the
- 17 right one this time.
- 18 Good morning, Commissioners. Our job has been to
- 19 independently verify information that has been submitted
- 20 by BHP Billiton to analyze alternatives and potential
- 21 impacts to identify feasible mitigation and to assist the
- 22 lead agencies to prepare the joint Environmental Impact
- 23 Statement, Environmental Impact Report EIR for public
- 24 review and comment.
- 25 Now, I'd like to welcome the Spanish-speaking

- 1 community.
- 2 (Thereupon she spoke in Spanish.)
- 3 --000--
- 4 MS. KARPOWICZ: May I have the next, slide
- 5 please. Here is a map of the proposed project location in
- 6 the region. The deepwater port will be located about 14
- 7 statute miles or 12.1 nautical miles off shore to the
- 8 closest point to land and seaward of the coastwise
- 9 shipping lanes, which are used by more than 5,000 vessels
- 10 every year. The FSRU is the only place where LNG will be
- 11 handled.
- 12 The FSRU is more than 18 nautical miles from
- 13 Anacapa Island, the nearest point in the Channel Islands
- 14 National Park. And the FSRU and LNG carrier roots would
- 15 also be outside the boundaries of the marine sanctuary.
- Next slide, please.
- 17 --000--
- 18 MS. KARPOWICZ: One or two LNG carries per week
- 19 will unload at the FSRU where the LNG would be heated and
- 20 stored before shipment to shore. Gas would be tested to
- 21 ensure it meets California standards at the FSRU and again
- 22 on shore at the metering station.
- 23 Underground pipelines would transport natural gas
- 24 to the existing southern California gas system.
- Next slide, please.

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- 2 MS. KARPOWICZ: Here is a schematic of the FSRU.
- 3 The tanks are about 200 feet above the waterline.
- 4 Next slide, please.
- 5 Next slide, please.
- --000--
- 7 MS. KARPOWICZ: Here you can see the point at
- 8 which the optional pipelines would cross the shore. A
- 9 technique called horizontal directional boring would be
- 10 used to bore the pipelines deeply from a point about 4,000
- 11 feet off shore under Ormand Beach to a location on the
- 12 Reliant Power Plant property. The gas would be metered
- 13 and then be transmitted by SoCal Gas through new
- 14 pipelines. The two proposed on-shore pipelines -- next
- 15 slide, please.
- 16 --000--
- 17 MS. KARPOWICZ: The Center Road pipeline in
- 18 Oxnard in Ventura county and the line 225 pipeline loop in
- 19 Santa Clarita are shown here. SoCal Gas has franchise
- 20 agreements with the City of Oxnard with Ventura County and
- 21 with Santa Clarita that grant it the right to lay and use
- 22 pipelines in streets and other rights of way in lieu of
- 23 any additional existing or future local requirement to
- 24 obtain a permit.
- Next side, please.

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- 2 MS. KARPOWICZ: This aerial shows the rural
- 3 agricultural nature of the Center Road pipeline shown as
- 4 the red line. About 90 percent of this on-shore pipeline
- 5 would be on agricultural land in existing rights of way.
- 6 Although the on-shore pipeline originally would have used
- 7 the route of the existing large diameter gas pipeline that
- 8 serves the powerplant, the route was changed in response
- 9 to public comment --
- 10 Next slide, please.
- 11 --000--
- 12 MS. KARPOWICZ: -- in order to avoid a high
- 13 school at the northern end. And again it's the red line
- 14 here.
- Next slide, please.
- --o0o--
- MS. KARPOWICZ: As you can see here, we have a
- 18 very successful public participation program including
- 19 translating the EIR into Spanish. As a result of public
- 20 comments, a number of changes were made in the proposed
- 21 project. For example, the primary gas odorization could
- 22 take place on the FSRU instead of on shore to aid in leak
- 23 detection, and the construction, equipment and engines on
- 24 the FSRU will be upgraded to burn more cleanly.
- In addition, the use of a closed loop system for

1 cooling generators has reduced the use of sea water by

- 2 about 60 percent.
- 3 Next slide, please.
- 4 --000--
- 5 MS. KARPOWICZ: We received about 3,000
- 6 individual comments. And these are the topics that
- 7 received the most comments.
- 8 My colleague, Dr. Andy Wolford, will summarize
- 9 the results of the Independent Risk Assessment, and Paul
- 10 Van Kerkhove who independently reviewed all of the air
- 11 quality information and conducted the supplemental
- 12 modeling is also here and available to answer questions.
- Next slide, please.
- 14 --00o--
- 15 MS. KARPOWICZ: We analyzed the project based on
- 16 the project description including 57 applicant measures,
- 17 which are commitments by BHPB that exceed regular
- 18 requirements and are enforceable as part of the mitigation
- 19 monitoring program.
- 20 CEQA requires that we use the scoping process to
- 21 focus on the most important impacts. We identified 100
- 22 potential impacts and determined through our analysis that
- 23 66 required mitigation. We identified 87 mitigation
- 24 measures to avoid, minimize, reduce or compensate impacts.
- 25 All of the mitigation, both the applicant measures and the

1 mitigation measures, are legally enforceable through the

- 2 mitigation monitoring program. They would also be
- 3 incorporated in the CSLC lease and in the deepwater port
- 4 license.
- 5 We also evaluated the effectiveness of
- 6 mitigation. For example, after reviewing all of the
- 7 geotechnical studies for the mooring point and the
- 8 off-shore and on-shore pipelines and based on a thorough
- 9 review by the CSLC engineers, we concluded that the
- 10 pipelines could be safely designed that no significant
- 11 impact would result in the geotechnical area.
- 12 I would like to mention here that CEQA is just
- 13 one of the environmental regulatory processes that would
- 14 apply to the proposed project. Additional permits would
- 15 be issued in compliance with various environmental laws
- 16 and regulations. For example, the U.S. EPA would issue
- 17 air permits under the Clean Air Act and a national
- 18 pollutant discharge permit for discharges of treated waste
- 19 water.
- 20 The U.S. Army Corps of Engineers would issue
- 21 wetland permits and NOAA would issue marine mammal
- 22 permits. None of these agencies may issue a permit before
- 23 the environmental review process is complete. And
- 24 typically the permitting agency imposes conditions through
- 25 the permits in addition to the mitigation that is

- 1 described in the final EIS/EIR.
- Now, I'd like to run through the 20 impacts that
- 3 would remain significant even after the mitigation is
- 4 applied.
- We have 6 -- next slide, please.
- 6 --000--
- 7 MS. KARPOWICZ: We have six temporary impacts.
- 8 Temporary is defined as, "Returning to baseline conditions
- 9 after the activities stops." The six temporary impacts
- 10 are air, emissions and noise that would occur primarily
- 11 during construction.
- 12 Next slide, please.
- --000--
- 14 MS. KARPOWICZ: Noise and vibration related to
- 15 the horizontal directional boring and other construction
- 16 activities for the on-shore pipelines would exceed local
- 17 standards during the construction periods. The
- 18 construction period off shore is about 50 days. The
- 19 horizontal directional boring across the shoreline would
- 20 be about 40 days -- 45 days and the on-shore pipelines
- 21 about 240 days.
- Next slide, please.
- --000--
- 24 MS. KARPOWICZ: Short term returns to baseline
- 25 conditions on its own within one year of activity.

1 The FSRU and project vessel would store diesel

- 2 fuel. They oil pollution contingency plans and existing
- 3 regulations require prompt clean up of any spills.
- 4 However, basically any reportable spill to water is
- 5 considered to be significant.
- 6 Next slide, please.
- 7 --000--
- 8 MS. KARPOWICZ: Long term is defined as,
- 9 "Returning to baseline conditions after restoration and
- 10 monitoring." And we have six long-term impacts primarily
- 11 related to accidental spills or releases of diesel fuel or
- 12 LNG. Dr. Wolford will talk about the low-risk of
- 13 accidents. But nevertheless, in the event of a fuel spill
- 14 or an accident involving LNG, marine biota, including
- 15 marine mammals that have special protection could be
- 16 injured or killed.
- 17 Although, the general public would not be
- 18 affected by small operational spills, since they would not
- 19 extend outside of the safety zone from which the public is
- 20 excluded, members of the public could be injured or killed
- 21 by release from a collision or intentional attack if they
- 22 were off shore in the zone of influence.
- Next slide, please.
- --000--
- MS. KARPOWICZ: A pipeline accident affecting the

- 1 off-shore or on-shore pipelines could also result in
- 2 injury or death. However, pipeline accidents are regarded
- 3 as rare. The safety of natural gas pipelines is heavily
- 4 regulated and they are periodically inspected. In
- 5 addition, SoCal Gas would reduce the valve spacing and use
- 6 a thicker walled stronger pipe than required.
- 7 Next slide, please.
- 8 --000--
- 9 MS. KARPOWICZ: Permanent impacts are those that
- 10 never return to baseline we have seven permanent
- 11 impacts.
- 12 The FSRU would be visible to and change the
- 13 experience for recreational boaters in its vicinity. And
- 14 even though there are a lot of similar size vessels in the
- 15 shipping lanes, the FSRU would be permanent.
- In the area of agriculture, although most of the
- 17 area affected by the pipeline construction would return to
- 18 agricultural use, there is a .1 acre of agricultural land
- 19 that would be permanently affected.
- With regard to air quality, the regulatory
- 21 setting is quite complicated and controversial. We have
- 22 used existing regulations and guidance to evaluate the
- 23 construction emissions and the emissions from the FSRU and
- 24 LNG carriers while they're off-loading cargo. The
- 25 emissions of oxides of nitrogen and reactive organic

1 compounds are organic -- are ozone precursors. These are

- 2 chemicals that react with other chemicals in the
- 3 atmosphere to create ozone, or what we commonly call smog.
- 4 Ozone formation cannot be modeled on a
- 5 project-specific basis, and therefore, the approach is to
- 6 require emissions reductions of NOx to mitigate this
- 7 impact.
- 8 The applicant has proposed an emissions reduction
- 9 program that would achieve reductions of NOx by
- 10 retrofitting two tugs that are not project vessels with
- 11 cleaner burning engines. However, emissions from the
- 12 mobile sources, such as the LNG carriers, are not
- 13 regulated. For the purposes of this CEQA impact analysis,
- 14 we have used CARB's guidance that emissions within
- 15 California's coastal waters are about 90 miles off shore
- 16 could affect on-shore water quality -- or air quality.
- 17 And therefore the total reduction of NOx should be equal
- 18 to the total emissions from the LNG carriers.
- 19 Because BHP is about five tons per year short of
- 20 the required amount of emissions reductions, this impact
- 21 will be made significant.
- 22 As you know, no regulations have been developed
- 23 as yet to implement the recent greenhouse gas legislation.
- 24 However, the EIR does include calculations of the
- 25 greenhouse gas emissions that would result from the

1 proposed project and some of the measures to reduce air

- 2 pollution would also reduce the emissions of greenhouse
- 3 gases.
- 4 Next slide, please.
- 5 --000--
- 6 MS. KARPOWICZ: NOAA is the agency responsible
- 7 for enforcing the Marine Mammal Protection Act. We have
- 8 included the results of noise modeling and determined that
- 9 even with mitigation marine mammals could be adversely
- 10 affected. The U.S. Coast Guard is continuing the
- 11 consultation process with NOAA. And if it is determined
- 12 that a take permit -- an incidental take permit is
- 13 required, the project will not be allowed to proceed until
- 14 the conditions of the permit are met. Similarly, although
- 15 noise from service vessels would be sporadic, it will
- 16 occur throughout the life of the project.
- 17 And now I'd like to introduce Dr. Wolford, who
- 18 will discuss the Independent Risk Assessment.
- 19 DR. WOLFORD: Good morning, Commissioners.
- 20 Can we switch to the Independent Risk Assessment
- 21 slides, please.
- 22 (Thereupon an overhead presentation was
- 23 Presented as follows.)
- DR. WOLFORD: Thank you.
- 25 I'm Andy Wolford and I'm Riskology Incorporated.

1 Our firm was hired to support Ecology and Environment in

- 2 the development of the Independent Risk Assessment to
- 3 support the public safety section of the environmental
- 4 impact process.
- 5 Next slide, please.
- --000--
- 7 DR. WOLFORD: In terms of the organization of my
- 8 talk today, I'd like to give you a little background on
- 9 the reason for the study; how we scoped the issues; the
- 10 risk assessment process; I'll talk a bit about the key
- 11 technical elements of the approach; we'll review results
- 12 and hopefully give a feel for how to interpret those
- 13 results; the decision making; and then finally summarize.
- Next slide.
- 15 --00o--
- DR. WOLFORD: A site-specific Independent Risk
- 17 Assessment was conducted to support the environmental
- 18 impact process for Cabrillo Port. The goal of that was to
- 19 determine objectively the valuation of public risk, public
- 20 exposure from potential LNG release scenarios. And just
- 21 something to keep in mind, while you understand the term
- 22 risk really refers to a scenario occurring, its likelihood
- 23 of occurrence and the consequences should that scenario
- 24 come to pass.
- Next slide, please.

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- 2 DR. WOLFORD: Now what I've shown here on this
- 3 diagram, on the right side is the normal environmental
- 4 impact process in flow chart form, highlighting public
- 5 comment and input at various stages along the way.
- 6 Matching up with that is a diagram showing the
- 7 Independent Risk Assessment process, which involves the
- 8 components of understanding the system as proposed and the
- 9 project application, hazard identification and evaluation,
- 10 the development of appropriate scenarios, evaluating their
- 11 frequency of occurrence and consequences should they occur
- 12 and integrating them into the risk assessment statement.
- 13 Along the way you can see that there were a
- 14 number of cases where public comment and scoping was
- 15 integrated into the process across both.
- Next slide, please.
- 17 --000--
- 18 DR. WOLFORD: Just highlighting some of the
- 19 scoping activity. As is done in any risk assessment and
- 20 as is standard practice rolled over for quantitative risk
- 21 assessment, the hazard identification and scenario
- 22 development process is very reliant upon exhaustively
- 23 looking at history of accidents, formulating the
- 24 possibility of different accidents which have not occurred
- 25 and then finally soliciting and combing any expertise

1 available to determine the completeness of the hazards

- 2 model.
- 3 Public comment was incorporated as shown on the
- 4 previous slide, Riskology reviewed the incident history,
- 5 and some specialized workshops were held which were unique
- 6 to this project, in which a security vulnerability
- 7 assessment and hazard identification workshop totaling a
- 8 four-day period was conducted early on and it involved 55
- 9 technical specialists and 21 and 17 agency participants in
- 10 the respective meetings. So that there was a simultaneous
- 11 buy-in of the scenarios that were developed.
- 12 A consensus was reached then on major hazardous
- 13 accidents to model. And as one final note on the scoping,
- 14 as we progressed through the draft Independent Risk
- 15 Assessment to the one you have in your hands now, there
- 16 was a technical evaluation conducted by Sandia National
- 17 Laboratories. One component of that evaluation was to
- 18 assist in peer review of the credible accident scenarios
- 19 that were modeled and expert input into specific accidents
- 20 or intentional events.
- 21 Next slide, please.
- --000--
- DR. WOLFORD: Now this is not a technical
- 24 presentation. I just wanted to highlight some of the key
- 25 aspects of the technical approach.

1 We were looking for the types of hazards in which

- 2 there was a breach of LNG cargo, which had the potential
- 3 of having public impacts outside the exclusion zone.
- 4 Physical processes that are in play when this occurs are
- 5 the pool spread of LNG and the vapor dispersion of the
- 6 vapor coming off of the LNG.
- 7 These were both modeled with validated
- 8 Computational Fluid Dynamics software, CFD for short,
- 9 which is a state-of-the-art modeling tool used for this
- 10 type of analysis.
- Now, it is also the recommended approach to model
- 12 exactly this type of risk assessment by Sandia National
- 13 Laboratoies' guidance issued in December of 2004.
- 14 The second point to make is that with regard to
- 15 understanding the size of release, an aspect that needs to
- 16 be understood is how large of a hole or breach could occur
- 17 in the cargo. State-of-the-art finite element analysis
- 18 was used for ship collision damage modeling to determine
- 19 the containment system hole size of accidental events.
- The third point to note is that there's been some
- 21 concern about understanding the cascading failure
- 22 possibilities aboard a vessel like this, that is in which
- 23 an initial fire involving some amount of inventory may
- 24 then escalate and encompass additional inventory.
- 25 Cascading failures were modeled for both escalations from

1 one primary breach to two and three tanks on this FSRU.

- I want to leave you with a point that Sandia
- 3 National Laboratories was brought into provide a technical
- 4 peer review, which lasted nine months, in which technical
- 5 consensus was reached across all aspects of scoping and
- 6 modeling. And their report forms an appendix also to this
- 7 EIR/EIS.
- 8 Next slide.
- 9 --000--
- 10 DR. WOLFORD: This chart is one that's been
- 11 published many times in the executive summary of the risk
- 12 assessment and as well in the public safety section of the
- 13 EIR/EIS. And what you see here are two radiuses, two
- 14 circles drawn around the proposed location. And those
- 15 distances are 2.6 kilometers and 11.7 kilometers
- 16 respectively.
- 17 What this represents are the two worst credible
- 18 pool fires, that is in which a liquid spill which ignites
- 19 spreads on the ocean and casts a radiation level at a
- 20 distance of 2.61 kilometers and vapor cloud fire in which
- 21 a proposed, albeit much less likely, that in which a
- 22 breach occurs and the ignition does not occur immediately,
- 23 which allows the liquid to be released, the vapor to be
- 24 evaporated off the pool and then it encounters an ignition
- 25 source at some point down the wind. So this area has --

- 1 this volume has been filled with LNG vapor and the
- 2 ignition occurs later. And that one we reached 11.7
- 3 kilometers for the worst credible.
- 4 In both cases, these worst credible events were
- 5 associated with intentional threats and not accidental
- 6 events, such as ship collisions. These would be acts of
- 7 sabotage or terrorism.
- 8 To help you understand that we're actually not
- 9 comparing apples to apples when we draw these two
- 10 circles -- next slide, please.
- 11 --00o--
- 12 DR. WOLFORD: -- I also want to show you -- I
- 13 think we can all relate to the idea of a liquid pool
- 14 burning. It's a fairly steady state understanding of
- 15 that. And we've seen it on our barbecue grills and things
- 16 of that nature.
- 17 But what we don't really relate to is the vapor
- 18 cloud fire. And what I've done here is provided some
- 19 animation that shows the area traced out as a result of
- 20 this flammable region of the vapor cloud.
- 21 Go ahead and run it. If you click it again, it
- 22 will run.
- Don't click it twice.
- 24 There you go. And it grows to encounter the
- 25 shipping lane in 30 minutes. But now you see it's

1 beginning to move downstream and shrink at the same time,

- 2 encountering the second shipping lane, reaching its
- 3 maximum extent another 30 minutes later, and that circle
- 4 is drawn. As you can see, it includes both shipping
- 5 lanes. But in point of fact, there's no fuel left when it
- 6 reaches the second one to expose those mariners to the
- 7 same hazard.
- Now let's talk about timing.
- 9 Next slide, please.
- 10 --000--
- 11 DR. WOLFORD: For our vapor cloud hazards the
- 12 time for that vapor cloud to reach the edge of the first
- 13 shipping lane was as shown 30 minutes. The time for the
- 14 vapor cloud to cross the southbound lane took another 30
- 15 minutes. So those mariners have a 30-minute exposure time
- 16 to that vapor cloud.
- 17 The time for the flame to burn across the
- 18 southbound lane altogether is two minutes. That's the
- 19 time in which the fire could be present from one side of
- 20 the lane to the other.
- 21 For the pool fire, it's slightly different,
- 22 because that fire occurs at a remote location and thermal
- 23 radiation is then exposed to that flame. And the duration
- 24 of that is nine minutes.
- 25 So I hope that will give you all a feel for the

1 differences in these hazards and what those circles

- 2 represent as worst credible.
- 3 And then our next slide --
- 4 --000--
- 5 DR. WOLFORD: -- highlights the few issues about
- 6 the results.
- 7 First of all, I'd like to make sure everyone
- 8 understands that this has been driven to be a conservative
- 9 analysis all along the way. With respect to the
- 10 technology model, that simple video that you just saw,
- 11 literally hundreds of spill and dispersion simulations
- 12 were run on this Computational Fluid Dynamic software to
- 13 arrive at the final one to use as our worst credible.
- 14 No credible impact reaches shore. So we are
- 15 therefore not looking at public safety impacts on
- 16 shore-based people. Operational events result in
- 17 absolutely no public impacts as we understand, and that
- 18 would be not to exclude a crew may have a potential
- 19 exposure, but we do not count them in the public.
- 20 Catastrophic events, worst credible, divide into
- 21 intentional and accidental scenarios. And as you see,
- 22 pool fires do not reach the shipping lanes. The vapor
- 23 clouds for that fire scenario reaches the lane, but it's
- 24 transient in its exposure time.
- 25 And finally an aspect from the finite element of

1 modeling with respect to the ship's collision scenarios is

- 2 that the Moss tank design, chosen by BHP in this
- 3 development, represents a very robust design against
- 4 marine collisions due to the structural steel, the outer
- 5 and inner hull as to the deformation before a breach can
- 6 occur cargo containment system.
- 7 Next slide.
- 8 --000--
- 9 DR. WOLFORD: And I'll leave you with this. The
- 10 Independent Risk Assessment was conducted and completed a
- 11 number of months ago, December of '05. And recently, the
- 12 GAO have come out with a survey report highlighting some
- 13 of the risks of LNG carriers. And by way of comparison,
- 14 just to show you the gray card on how we did on that,
- 15 first of all, we exhibited in the Cabrillo Port IRA a
- 16 greater conservatism than that found in all of the
- 17 surveyed results in the GAO survey study.
- 18 Specific items called out in the GAO report that
- 19 are focus areas, include LNG spill and fire model testing.
- 20 This would benefit all LNG permitting and essentially
- 21 benefit anyone involved with modeling of this phenomenon,
- 22 not specific to this particular port or application.
- 23 Cascading failures were in deed addressed.
- 24 Comprehensive modeling, interaction of physical processes
- 25 were not addressed in this report per se. But the lack of

- 1 the interaction and separating them into their own
- 2 physical processes leads to conservatism. An example of
- 3 that would be, we allow all of the pool to flow out to its
- 4 maximum radius before we start the evaporation process.
- 5 Whereas, in the real world, it would begin the minute the
- 6 pool started to form.
- 7 Risk tolerability assessments we mentioned. And,
- 8 in fact, this is something that is a regulatory issue to
- 9 determine acceptance criteria, both at the State and
- 10 federal level. So it's a timing issue of having that in
- 11 place before an application is submitted.
- 12 Vulnerability of containment systems should be
- 13 modeled specifically, and that was done in Cabrillo Port
- 14 using finite element modeling. The GAO report calls out a
- 15 suggestion to model the effective sea water inflow in a
- 16 hole which pierced through the outer shell of the hull.
- 17 All of our hole sizes -- all of our hull scenarios were
- 18 above the waterline, so this is not relevant to us.
- 19 And finally the impact of wind, wave and weather
- 20 should be looked into. And this is purely a scientific
- 21 matter. There's some history in attempting to do this,
- 22 and there is really no scientific consensus on how to
- 23 represent the effective ways on pool spread. There's a
- 24 lot of opportunity for research here.
- 25 So I thank you for your time today and I'm

- 1 available for questions throughout the day.
- 2 LIEUTENANT COMMANDER GOODING: Good morning, Mr.
- 3 Chairman and distinguished commissioners. I am Lieutenant
- 4 Commander Peter Gooding, Chief of the Waterways Management
- 5 Division at U.S. Coast Guard Sector Los Angeles Long
- 6 Beach. It is my pleasure to appear before you today to
- 7 discuss the Coast Guard's role in providing safety and
- 8 security of the proposed Deepwater Liquefied Natural Gas
- 9 Port and associated LNG vessels.
- 10 The Commander of Sector Los Angeles Long Beach
- 11 is responsible for the navigable waters that stretch from
- 12 the Orange County/San Diego County line to the San Luis
- 13 Obispo/Monterey county line and performs several
- 14 functions, including Captain of the Port to ensure safe
- 15 navigation. The Sector Commander is also the Federal
- 16 Maritime Security Coordinator, Officer in Charge of Marine
- 17 Inspections, Search and Rescue Coordinator and Federal
- 18 On-scene Coordinator for environmental response.
- 19 As the federal government's lead agency for
- 20 Maritime Homeland Security, the Coast Guard plays a major
- 21 role in ensuring all facets of marine transportation of
- 22 LNG, including LNG vessels and deepwater ports, are
- 23 operated safely and securely, and that the risks
- 24 associated with the marine transportation of LNG are
- 25 managed responsibly. Today, I will briefly review the

1 applicable laws and regulations that provide our authority

- 2 and the requirements for safe and secure operations of LNG
- 3 vessels and deepwater ports.
- 4 Today there are over 200 LNG vessels operating
- 5 worldwide and another 100 or so under construction. While
- 6 there are no longer any U.S. flag LNG vessels, all LNG
- 7 vessels calling in the U.S., including at a deepwater
- 8 port, must comply with certain domestic regulations, in
- 9 addition to international requirements. Our domestic
- 10 regulations for LNG vessels were developed in the 1970s
- 11 under the authority of the various vessel inspection
- 12 statutes that are now codified in Title 46, United States
- 13 Code.
- 14 Relevant laws providing the genesis for LNG
- 15 vessel regulations include the Tank Vessel Act and the
- 16 Ports and Waterways Safety Act of 1972, as amended by the
- 17 Port and Tanker Safety Act of 1978. Regulations located
- 18 in Title 46 Code of Federal Regulations, CFR, Part 154,
- 19 "Safety Standards for Self-Propelled Vessels Carrying Bulk
- 20 Liquefied Gases," specify requirements for the vessel's
- 21 design, construction, equipment and operation. Our
- 22 domestic regulations closely parallel the applicable
- 23 international requirements, but are more stringent in the
- 24 following areas: The requirement for enhanced grades of
- 25 steel for crack arresting purposes in certain areas of the

1 hull, specification of higher allowable stress factor for

- 2 certain independent type tanks and prohibiting the use of
- 3 cargo venting as a means of cargo temperature and pressure
- 4 control.
- 5 All LNG vessels in international service must
- 6 comply with the major maritime treaties agreed to by the
- 7 International Maritime Organization, such as the
- 8 International Convention for the Safety of Life at Sea,
- 9 popularly known as the SOLAS Convention and the
- 10 International Convention for the Prevention of Pollution
- 11 from Ships, known as the MARPOL Convention.
- 12 In addition, LNG vessels must comply with the
- 13 International Code for the Construction and Equipment of
- 14 Ships Carrying Liquefied Gas in Bulk, known as the IGC
- 15 Code.
- 16 Before being allowed to trade in the United
- 17 States, operators of foreign LNG carriers must submit
- 18 detailed vessel plans and other information to the United
- 19 States Coast Guard Marine Safety Center to establish that
- 20 the vessels have been constructed to the higher standards
- 21 required by our domestic regulations. Upon the MSC's
- 22 satisfactory plan review and on-site verification by Coast
- 23 Guard marine inspectors, the vessel is issued a
- 24 Certificate of Compliance. This indicates that it has
- 25 been found in compliance with applicable design,

- 1 construction and outfitting requirements.
- 2 The Certificate of Compliance is valid for a
- 3 two-year period, subject to an annual examination by Coast
- 4 Guard marine inspectors, who verify that vessels remain in
- 5 compliance with all applicable requirements. As required
- 6 by 46 U.S.C. 3714, this annual examination is required of
- 7 all tank vessels, including LNG carriers.
- 8 While conventional crude oil deepwater ports have
- 9 been in operation around the world for many years, LNG
- 10 deepwater ports were allowed when the Deepwater Port Act
- 11 was amended in 2002. Currently, there is only one LNG
- 12 deepwater port in operation in the United States. The
- 13 Coast Guard's regulations apply a "design basis" approach,
- 14 rather than mandate a series of prescriptive requirements.
- 15 Under a design basis approach, Cabrillo Port is evaluated
- 16 on its own technical merits, using relevant engineering
- 17 standards and concepts that have been approved by
- 18 recognized vessel classification societies and competent
- 19 industry technical bodies.
- 20 Since September 11, 2001, additional security
- 21 measures have been implemented, including the requirement
- 22 that all vessels calling in the United States must provide
- 23 the Coast Guard with a 96-hour advance notice of arrival,
- 24 increased 24 hours pre-9/11. This notice includes
- 25 information on the vessel's last ports of call, crew

1 identities, and cargo information. This notice is also

- 2 required before a vessel can call on a deepwater port.
- 3 From this information, the Coast Guard runs it
- 4 through various intelligence databases to ensure the crew
- 5 does not pose a threat to the deepwater port. If a vessel
- 6 does not provide the 96-hour advance notice of arrival, it
- 7 will not be able to arrive at the deepwater port until it
- 8 meets that requirement.
- 9 From this information, the Captain of the Port
- 10 reviews the vessel's history and conducts his or her own
- 11 risk assessment to determine if the vessel should be
- 12 boarded at-sea, where Coast Guard personnel would conduct
- 13 special "security sweeps" of the vessel and ensure it is
- 14 under the control of proper authorities before it is
- 15 allowed to moor with the deepwater port and offload its
- 16 cargo.
- 17 In addition to the requirements to provide the
- 18 96-hour advance notice of arrival, every SOLAS
- 19 certificated vessel is required to carry an Automatic
- 20 Identification System. This system gives the vessel's
- 21 name, course, speed and location on the waterway. We then
- 22 compare this AIS signal to the radar coverage and ensure
- 23 that the vessel is transmitting as we would expect.
- Of course, one of the most important post-911
- 25 maritime security improvements has been the passage of the

1 Maritime Transportation Security Act. Under the authority

- 2 of MTSA, the Coast Guard developed a comprehensive new
- 3 body of security measures applicable to vessels, marine
- 4 facilities and maritime personnel. Our domestic maritime
- 5 regime is closely aligned with the International Ship and
- 6 Port Facility Security Code. The ISPS Code is a mandatory
- 7 requirement of the SOLAS Convention. It was adopted at
- 8 the IMO in December 2002 and came into effect on July 1st,
- 9 2004.
- 10 Under the ISPS code, vessels in international
- 11 service, including LNG vessels, must have an International
- 12 Ship Security Certificate. To be issued an ISSC by its
- 13 flag state, the vessel must develop and implement a
- 14 threat-scalable security measures for cargo handling and
- 15 delivery of ship stores, surveillance and monitoring,
- 16 security communications, security incident procedures, and
- 17 training and drill requirements. The plan must also
- 18 identify Ship Security Officer who is responsible for
- 19 ensuring compliance with the ship's security plan. The
- 20 Coast Guard rigorously enforces this international
- 21 requirement by evaluating security compliance as part of
- 22 our ongoing port state control program.
- 23 Another requirement under ISPS and MTSA is for
- 24 LNG carriers to have a ship security alert system. This
- 25 is a hidden button that only the crew of the vessel knows,

1 that if triggered, sends a radio signal that the vessel is

- 2 involved in a Transportation Security Incident, which the
- 3 Coast Guard has a predetermined response to this signal.
- In order to ensure the deepwater port is
- 5 protected from external attack, the Coast Guard's
- 6 deepwater port regulations require that all LNG deepwater
- 7 ports develop and implement a security plan that, at a
- 8 minimum, addresses the key security plan elements provided
- 9 in Title 33 Part 106, "Maritime Security: Outer
- 10 Continental Shelf Facilities." A risk and consequence
- 11 analysis is completed as part of the risk mitigation
- 12 strategy.
- 13 Based on the results of the risk analysis, port
- 14 security measures are developed between the applicant and
- 15 the Coast Guard local Captain of the Port that represent
- 16 operational requirements and security procedures the
- 17 operator will have to follow as a condition of their
- 18 license. The Captain of the Port has the option of
- 19 utilizing additional assets as deemed appropriate. In
- 20 addition, the deepwater port must have a person in charge
- 21 of port operations who maintains radar surveillance of the
- 22 deepwater port and the area to be avoided. No port
- 23 operations would be permitted unless and until the local
- 24 Federal Maritime Security Coordinator is satisfied the
- 25 facility can operate in a safe and secure manner.

1 Further more, the deepwater port regulations

- 2 allow for the adjacent coastal states, in this case
- 3 California, to petition the Captain of the Port to require
- 4 the licensee to amend their operations and security plans
- 5 if we have failed to address any hazardous items.
- 6 The basis for the operations and security plan is
- 7 the Independent Risk Assessment, which Mr. Wolford spoke
- 8 about earlier. The purpose of this work is to develop a
- 9 stand alone technical report on the potential risk to the
- 10 public from the proposed project, in this case Cabrillo
- 11 Port. The primary objective of the IRA is to assess
- 12 impacts to humans and property not associated with the
- 13 deepwater ports from an event that compromises LNG
- 14 containment.
- 15 For the Cabrillo Port project, an IRA was
- 16 conducted and reviewed by Sandia National Laboratory. The
- 17 third party assessment was conducted in response to
- 18 Sandia's 2004 report, "Guidance on Risk Analysis and
- 19 Safety Implications of a Large Liquefied Natural Gas Spill
- 20 Over Water." The 2006 IRA included Sandia's
- 21 recommendations and mitigation measures were developed
- 22 from the IRA. These mitigation measures will then be
- 23 incorporated into the development of the operations and
- 24 security plans for Cabrillo Port.
- Thank you for giving me this opportunity. I'd

- 1 ask that any questions be sent in writing.
- 2 Thank you.
- 3 CHAIRPERSON GARAMENDI: I do have a question.
- 4 Does the FSRU have the same requirements as a ship?
- 5 LIEUTENANT COMMANDER GOODING: It actually has
- 6 additional requirements, because of the Deepwater Port
- 7 Act.
- 8 CHAIRPERSON GARAMENDI: Are the staff on the FSRU
- 9 licensed and reviewed as to their security clearances?
- 10 LIEUTENANT COMMANDER GOODING: They are licensed
- 11 mariners to operate on the FSRU. And they are, as the
- 12 crew, required to go through the security checks.
- 13 CHAIRPERSON GARAMENDI: So every crew member on
- 14 the FSRU is -- their security clearance -- they are
- 15 cleared for security purposes?
- 16 LIEUTENANT COMMANDER GOODING: They're cleared
- 17 through our national database for a threat, but they don't
- 18 get a security clearance from the federal government.
- 19 CHAIRPERSON GARAMENDI: All right. How about the
- 20 staff on the ships that are bringing in the LNG?
- 21 LIEUTENANT COMMANDER GOODING: The 96-hour rule
- 22 applies to them, again.
- 23 CHAIRPERSON GARAMENDI: What kind of clearance do
- 24 they have?
- 25 LIEUTENANT COMMANDER GOODING: We run them

- 1 through our national database.
- 2 CHAIRPERSON GARAMENDI: Every crew member?
- 3 LIEUTENANT COMMANDER GOODING: Yes, sir.
- 4 They have to provide their passport number, their
- 5 date of birth, their names and then we randomly check the
- 6 individuals on board the vessels.
- 7 CHAIRPERSON GARAMENDI: Are there any
- 8 notifications between the -- was it 96 hours? -- and the
- 9 arrival of the ship at the FSRU?
- 10 LIEUTENANT COMMANDER GOODING: 96 hours is the
- 11 arrival notification. And then after that there's a --
- 12 basically they have to stick to their time. The
- 13 regulations require that if you want to change your time,
- 14 you have to update it.
- 15 CHAIRPERSON GARAMENDI: But there's no
- 16 requirement for further notification until they arrive at
- 17 the FSRU?
- 18 LIEUTENANT COMMANDER GOODING: If anything
- 19 changes on board the vessel, they're required to change
- 20 it. So if they change crew members before they get there,
- 21 if they change their arrival time, if they sell the ship
- 22 in the process, they have to update all that information.
- 23 CHAIRPERSON GARAMENDI: What's the travel time
- 24 between the FSRU and California?
- 25 LIEUTENANT COMMANDER GOODING: I'd have to take

1 that one in writing and run it through the environmental

- 2 processor.
- 3 CHAIRPERSON GARAMENDI: What's the speed of an
- 4 LNG ship?
- 5 LIEUTENANT COMMANDER GOODING: All that --
- 6 CHAIRPERSON GARAMENDI: Miles per hour not
- 7 nautical miles.
- 8 (Laughter.)
- 9 LIEUTENANT COMMANDER GOODING: I do not have that
- 10 with me, sir.
- 11 CHAIRPERSON GARAMENDI: Twenty?
- 12 LIEUTENANT COMMANDER GOODING: Usually max speed
- 13 is about 20 knots. And so if you convert it, 20 knots is
- 14 a little bit faster, so it's about 25 miles an hour.
- 15 CHAIRPERSON GARAMENDI: Thank you.
- 16 CA/ARB STATIONARY SOURCES DIVISION CHIEF
- 17 FLETCHER: Good morning, Commissioners. Thank
- 18 you for the opportunity to provide the Air Resources
- 19 Board's perspective on the air quality aspects of the
- 20 Cabrillo Port. My name is Bob Fletcher and I'm Chief of
- 21 the Stationary Source Division at the Board.
- 22 We have actively participated in the review of
- 23 the emissions and air quality impacts of the project. Our
- 24 goals are to ensure that the Environmental Impact Report
- 25 provided a full picture of the impacts of the project and

- 1 provided appropriate mitigation of those impacts.
- As you may know, the Air Resources Board has no
- 3 direct permitting authority for the project. The U.S. EPA
- 4 must make the permitting decision and is required to do so
- 5 in a manner that is consistent with the rules of the local
- 6 air pollution control district, in this case the Ventura
- 7 County Air Pollution Control District.
- 8 ARB's staff role has been one of providing
- 9 technical and policy advice on various air quality issues
- 10 to the State Lands Commission, other interested parties
- 11 and the project proponents.
- 12 As part of our involvement, we have consistently
- 13 encouraged the project applicant to mitigate the oxides of
- 14 nitrogen impacts of the project, including vessel
- 15 emissions out to the California coastal waters boundary.
- 16 These are emissions that are not normally subject to
- 17 regulation as part of the air quality permitting process.
- 18 The California coastal waters were established
- 19 from air quality modeling studies a number of years ago
- 20 and generally represent the off-shore areas from which
- 21 vessel emissions may impact on-shore air quality. We have
- 22 sought mitigation of vessel emissions because these
- 23 emissions account for about half of the project's total
- 24 oxides of nitrogen emissions. And those emissions would
- 25 not necessarily be subject to mitigation via binding

- 1 permit.
- Over time, BHP has expanded the mitigation and
- 3 has, we believe, now proposed NOx emission reductions in
- 4 an amount roughly equal to the project emissions. This
- 5 would be accomplished primarily through repowering of two
- 6 tugs that routinely travel along the California coast.
- 7 We are aware that the U.S. EPA has made a
- 8 preliminary determination that the proposed project is not
- 9 subject to the Ventura County New Source Review rule, and
- 10 that the county air pollution control district disagrees
- 11 with the interpretation of that rule.
- 12 As indicated in our February 2007 memo to the
- 13 State Lands Commission, if the U.S. EPA changes its
- 14 position on the applicability of the rule, the NSR
- 15 requirements would need to be applied and full offsets for
- 16 the stationary source project emissions would be required.
- 17 Regardless of how the final permit requirements
- 18 are determined, we would still advocate for the mitigation
- 19 of vessel emissions not associated with the directly
- 20 permitted portions of that project.
- 21 Again, thank you for the opportunity to comment,
- 22 and I'm available throughout the day for comments.
- 23 CEC SPECIAL PROJECTS MANAGER PEREZ: Good
- 24 morning, Commissioners. My name is Pat Perez. I'm
- 25 manager of the special projects office at the California

- 1 Energy Commission. And like the previous speaker, Mr.
- 2 Fletcher, the Energy Commission has no permitting, legal
- 3 or regulatory authority on the actual siting of LNG
- 4 facilities.
- 5 What I'd like to do is talk a little bit about
- 6 the context of why we're here today and a little bit about
- 7 California's current energy outlook and the work that
- 8 we're doing to update our last forecast with respect to
- 9 natural gas.
- 10 California enjoys a unique position in this
- 11 world. If California were an independent country, it
- 12 would represent the 7th largest economy in the world. And
- 13 energy, in all its forms, is a key component of our robust
- 14 economy.
- 15 Historically, California has attempted to provide
- 16 its citizens a diverse portfolio of energy options. We
- 17 have long supported renewable energy and energy efficiency
- 18 as energy supply options, and have sought to use our
- 19 native solar, wind and geothermal resources to provide our
- 20 citizens with environmentally friendly energy options. In
- 21 fact, California has aggressively pursued cost effective
- 22 energy efficiency improvements and led the way in
- 23 renewable energy in the United States. Since 1975
- 24 California's energy efficiency programs have reduced
- 25 natural gas use per household by more than 50 percent.

1 California must continue to promote and foster

- 2 efficiency improvements in the use of renewable energy to
- 3 provide electricity to California's growing population,
- 4 while achieving the emission reduction targets outlined in
- 5 the Global Warming Solutions Act of 2006, often referred
- 6 to as Assembly Bill 32. AB 32 establishes in California
- 7 law a requirement to achieve specific emission reduction
- 8 standards for greenhouse gas emissions, applying market
- 9 mechanisms and regulatory emissions to achieving those
- 10 goals.
- 11 California has established the renewable
- 12 portfolio standard, which directs the State to invest
- 13 their own utilities to increase the renewable portion of
- 14 their energy mix with a goal of 20 percent California's
- 15 energy generation coming from renewable resources three
- 16 years from now.
- 17 The Energy Action Plan adopted by the Energy
- 18 Commission and the California Public Utilities Commission
- 19 calls for evaluating and developing implementation paths
- 20 to achieving renewable goals beyond 2010, and that is 33
- 21 percent renewables by 2020 in light of cost benefits as
- 22 well as risk analysis.
- 23 In addition, under Assembly Bill 32, the Energy
- 24 Commission and the California Public Utilities Commission
- 25 will propose to the Air Resources Board specific

- 1 greenhouse gas emission standards for all electric
- 2 utilities in California. Further more, Senate Bill 1368
- 3 requires the Energy Commission to ensure that power
- 4 purchased under future contracts for the publicly owned
- 5 utilities emits greenhouse gases at no higher than the
- 6 rate of emissions of greenhouse gas emissions from what we
- 7 call combined cycle natural gas base load generation.
- 8 California's publicly owned utilities import portions of
- 9 their electricity from out-of-state sources.
- 10 Today, California's goals for renewable energy
- 11 are the most ambitious in the nation. However, natural
- 12 gas remains the primary fuel for electricity generation
- 13 and is used to create over 40 percent of the electricity
- 14 in California. That is up from 20 percent in the last 30
- 15 years.
- Natural gas fire electric generation is one of
- 17 California's cleanest options for central station electric
- 18 power. However, California produces only about 15 percent
- 19 of the natural gas that is consumed in this state. The
- 20 remainder of that gas must be imported.
- 21 Imports currently come by way of eight major
- 22 pipelines from four major production areas in other parts
- 23 of North America, the western United States as well as
- 24 Canada. While sufficient pipeline capacity currently
- 25 exists to bring the natural gas to our state, California

1 is at the end of the pipeline and thus must compete with

- 2 our upstream customers and neighbors like Arizona and
- 3 Nevada whose use of natural gas is also increasing and at
- 4 a faster rate than California's. As a result, use of the
- 5 existing inter-state natural gas pipeline capacity can
- 6 vary year by year, as well as seasonal.
- 7 Gas-fired electricity generation in the United
- 8 States has more than tripled since 2000. The greatest
- 9 increase coming from the greater Texas area as well as the
- 10 southern states and, what we call, the Western
- 11 coordinating Council, which includes Canada and
- 12 California.
- 13 The rapid increase in natural gas use for
- 14 electricity generation in the U.S. will continue to
- 15 constrain California's ability and cost to secure
- 16 sufficient natural gas supplies.
- 17 Since 2001, the California Energy Commission has
- 18 licensed 36 powerplants. We have licensing authority for
- 19 powerplants of 50 megawatts or greater, totaling roughly
- 20 13,000 megawatts, all of which are fueled with natural
- 21 gas. Thirteen powerplant facilities are currently under
- 22 review at the Energy Commission. Of these projects, only
- 23 one facility is a combined hybrid powerplant using both
- 24 natural gas and solar thermal. An additional 14
- 25 powerplant project applications are expected in 2007. And

1 of these, about 60 percent will be fueled by natural gas,

- 2 if in deed approved and constructed.
- 3 In the past several years, California has
- 4 experienced volatile natural gas prices, a permanent
- 5 decrease in California natural gas production and an
- 6 increase in the cost of natural gas. To continue to
- 7 provide the citizens with a robust and growing economy,
- 8 California must assure that an abundant source of
- 9 reasonably priced natural gas is available. Liquefied
- 10 natural gas, a non-traditional supply source of natural
- 11 gas on the west coast, has the potential to provide new
- 12 natural gas supply opportunities and additional
- 13 infrastructure capacity into the west coast, while also
- 14 creating coastal industrial development challenges.
- 15 In 2005, the California Resources Agency with
- 16 participation of the California Energy Commission and the
- 17 California Public Utilities Commission held a two-day
- 18 workshop on liquefied natural gas, access issues and
- 19 deliverability for California.
- 20 From that, there were basically four major
- 21 objectives of that workshop. One was to explore ways to
- 22 maximize the potential cost-saving benefits to natural gas
- 23 consumers.
- 24 Secondly, identify what can be done to, A, ensure
- 25 that potential licensees for off-shore terminals operate

1 terminals in a manner that maximizes potential cost-saving

- 2 benefits to consumers and guards against potential market
- 3 problems.
- 4 Thirdly explore if LNG, whether imported directly
- 5 to California or indirectly through another state or
- 6 country, will be a secure source of supply. And what, if
- 7 anything, should be done to ensure a secure source of
- 8 supply.
- 9 And, finally, facilitate a discussion on these
- 10 issues in order to elicit additional information that
- 11 should be considered by the administration.
- The Energy Commission's 2003 and 2005 integrated
- 13 energy policy report examined the supply and demand for
- 14 natural gas to meet California's energy needs. The 2005
- 15 report expanded on the previous work conducted back in
- 16 2003 that highlighted the need for the development of LNG
- 17 facilities and associated infrastructure to serve the
- 18 natural gas needs of the western United States.
- 19 And if I may pause for a moment, when we're
- 20 talking about west coast, we're covering from British
- 21 Columbia all the way down to Baja, California.
- 22 The 2005 report concluded that California should
- 23 support the development of LNG facilities on the west
- 24 coast, but that any proposal to provide LNG to California
- 25 must meet California's environmental and safety concerns.

1 The Energy Commission will continue to study this

- 2 issue as part of our work on the 2007 Integrated Energy
- 3 Policy Report. In fact, staff conducted a public workshop
- 4 on March 26th and received valuable comments from the
- 5 public and key stakeholders about crucial input needs,
- 6 assumptions and key issues for preparing the 2007 Natural
- 7 Gas Assessment Report. That report will include an
- 8 analysis of the demand, supply, infrastructure, production
- 9 and delivery cost of natural gas based on the reference
- 10 case scenario.
- 11 In addition, the report will evaluate results of
- 12 at least two sensitivities of natural gas price to changes
- 13 in crude oil prices. The Energy Commission staff is
- 14 pursuing a new approach for conducting its long-term
- 15 natural gas assessment. Single point forecasts that
- 16 natural gas prices, for example, will be used only as a
- 17 reference point for discussion in order to consider a
- 18 broader range and their implications on energy policy.
- 19 Other changes since the 2005 report include
- 20 lessons learned from Hurricane Katrina that demonstrated
- 21 how LNG and natural gas platforms are vulnerable;
- 22 secondly, security of LNG; the inclusion and updates of
- 23 LNG facilities under construction in North America; the
- 24 treatment of the South Coast Air Quality Management
- 25 District's challenge of the California Public Utilities

1 Commission's natural gas quality rules and what impact

- 2 that may have on LNG imports; and, finally, the impacts of
- 3 reducing greenhouse gas emissions on fuel use looking at
- 4 it from more of a regional North American approach.
- 5 A staff draft report is expected to be complete
- 6 in May and a committee hearing is scheduled for June 7th
- 7 to present the preliminary results. A committee draft
- 8 integrated energy policy report will be issued in
- 9 September followed by additional hearings to receive
- 10 comments from the public and interested participants.
- 11 The proposed new natural gas assessment should be
- 12 completed by this fall and adopted by the Commission in
- 13 November 2007 as required by Senate Bill 1389. Although
- 14 the impacts of recent legislation and the Governor's
- 15 Executive Order to reduce greenhouse gases may not be
- 16 fully reflected in the demand forecast that will be used
- 17 for this assessment, the impacts of these policies,
- 18 however, on both electricity and natural gas use will be
- 19 the subject of a workshop on July 9th to discuss the
- 20 policy implications of a separate analysis under the 2007
- 21 integrated energy policy report that is looking at various
- 22 electricity and natural gas scenarios. The results of
- 23 this scenario project will also be included in our final
- 24 November report.
- Despite California's successful energy efficiency

1 programs, the growing use of renewable sources of energy

- 2 for electricity generation and the slower growth in
- 3 California natural gas demand compared to the rest of the
- 4 nation, imported natural gas is needed to meet growing
- 5 demand. LNG can provide an alternate non-domestic source
- 6 of natural gas with the potential of providing additional
- 7 supply sources and introducing more competition into the
- 8 west coast natural gas market.
- 9 Having access to a diverse portfolio of natural
- 10 gas suppliers to provide competitive prices and ensure
- 11 adequate supplies is what we believe is prudent. And
- 12 finally LNG from either the BHP Billiton project or some
- 13 other project proposed for the west coast could be an
- 14 important component of California's diversified energy
- 15 supply, but only if those projects fully comply with
- 16 California's high safety and environmental standards.
- 17 Thanks once again for your patience and time.
- 18 PUBLIC LAND MANAGER HAYS: Good morning, Mr.
- 19 Chairman and Members of the Commission. My name is Mary
- 20 Hays and I'm staff member with the Commission's Land
- 21 Management Division.
- 22 This morning's presentations provided an overview
- 23 of the environmental process reading to the final
- 24 Environmental Impact Report for the BHP Billiton Cabrillo
- 25 Port LNG Deepwater Port. I will be providing you with

1 information regarding the proposed right-of-way lease for

- 2 the Cabrillo Port project.
- 3 The lease application for the project was
- 4 submitted to the Commission in September of 2003 by the
- 5 applicant BHP Billiton LNG International a Delaware
- 6 Corporation. BHP LNG International is a wholly owned
- 7 subsidiary of BHP Limited Australia.
- 8 The application submitted by BHP is for the use
- 9 of State sovereign lands for the construction, use,
- 10 operation and maintenance of two 24-inch diameter subsea
- 11 pipelines that are proposed to be located off shore of
- 12 Ventura county.
- 13 The two pipelines are part of the overall project
- 14 that will be used to transport natural gas from BHP's FSRU
- 15 in federal waters crossing State waters and onto shore to
- 16 the new metering station to be located at the Reliant
- 17 Energy on Long Beach generating station.
- 18 The proposed lease area is a 200-foot wide
- 19 right-of-way approximately 4.53 nautical miles in length,
- 20 where the two pipelines will be constructed on seabed
- 21 approximately 100 feet apart. There is an exhibit in your
- 22 binder under Tab B of your materials.
- The off-shore pipeline construction and
- 24 installation will consist of the following steps: The
- 25 pre-lay hazard survey in advance of the construction to

1 evaluate the ocean bottom for seismic and soil conditions

- 2 to determine final engineering design and placement of the
- 3 pipelines and the anchor rage areas along the root; the
- 4 transportation of materials to the site via tug and barge;
- 5 off-shore pipeline preparation, welding and testing on the
- 6 pipeline lay vessel and supporting vessels; the pipeline
- 7 laying itself; and a post-lay internal inspection to
- 8 verify that the pipelines were not damaged during
- 9 installation and hydrostatic testing to test for leaks.
- 10 The shore crossing portion of the pipeline's
- 11 construction will be completed using a Horizontal
- 12 Directional Boring, HDB, technology for the length of
- 13 approximately 4,265 feet. And the pipes will be buried to
- 14 a minimum depth of 50 feet from the entry point on shore
- 15 to the exhibit point off shore on the seabed in
- 16 approximately 42 feet of depth.
- Most of the work area for the HDB will be on
- 18 shore at the entry points at the Reliant site. At the
- 19 off-shore exit points the pipeline vessel and support
- 20 vessel will be anchored in support of that process.
- 21 The lease contains certain provisions that
- 22 require the pipelines to be constructed and tested to meet
- 23 or exceed U.S. Department of Transportation construction
- 24 and safety standards, which are intended to protect the
- 25 public and to prevent natural gas facility accidents and

- 1 failures. We constructed using current seismic
- 2 engineering design standards at all fault crossings and
- 3 potential liquefaction areas and to comply with the
- 4 drilling fluid release monitoring plan, the hazard spill
- 5 prevention contingency plan and the vessel anchoring plan
- 6 prepared and approved for the project.
- 7 Once constructed the pipelines must be operated
- 8 and inspected and maintained in accordance with all
- 9 applicable federal and State regulations.
- 10 As the lead agency under the California
- 11 Environmental Quality Act, the Commission is responsible
- 12 for ensuring that the applicant will comply with a
- 13 mitigation monitoring and reporting program for the entire
- 14 project both on-shore and off-shore. The proposed lease
- 15 contains language that acknowledges the Commission's
- 16 authority to monitor and enforce the mitigation monitoring
- 17 program.
- 18 The lease also contains specific provisions that
- 19 outline the level of Commission staff involvement in the
- 20 engineering, design review, construction, operation
- 21 maintenance and inspection process beginning at the design
- 22 pre-phase, pre-construction phase through the
- 23 post-construction operational phase of the pipelines on
- 24 State lands as well as the FSRU anchoring, mooring,
- 25 transfer and pipeline facilities located in federal

- 1 waters.
- 2 The staff of the Commission's mineral resource
- 3 management division will review and approve all pipeline
- 4 engineering design calculations and drawings, project
- 5 specific construction reports and workplans and the
- 6 pipeline operation, repair and maintenance plan.
- 7 Staff of the Commission's Marine Facilities
- 8 Division will be involved in compliance and engineering
- 9 inspections of the FSRU and related facilities located in
- 10 federal waters and will be reviewing the safety
- 11 procedures, hazards analysis and emergency response plans
- 12 for these facilities.
- 13 In addition, the lease also contains provisions
- 14 that the applicant provide financial responsibility, which
- 15 includes the following: Liability insurance coverage of
- 16 not less than \$1 million; a performance bond in the amount
- 17 of eight million as security for the payment of rent and
- 18 to ensure compliance with all the terms of the lease; a
- 19 performance bond in the amount of \$47 million as security
- 20 for the costs associated with the construction of the
- 21 pipeline on State lands; a performance bond in the amount
- 22 of \$2 million as security for the construction mitigation
- 23 monitoring program for the entire project; a performance
- 24 bond in the amount of \$1 million as security for the
- 25 construction, revegetation and reclamation of the on-shore

- 1 pipeline portion of the project; and as additional
- 2 security the lease requires the fulfillment of all the
- 3 obligations under the lease to be guaranteed by BHP
- 4 Limited, Australia parent company of BHP LNG
- 5 International.
- 6 In summary, you have before you two actions to be
- 7 considered. First, the certification of the final
- 8 Environmental Impact Report that has been prepared as part
- 9 of the joint Environmental Impact Statement and
- 10 Environmental Impact Report for the Cabrillo Port LNG
- 11 Deepwater Port. And, second, the issuance of a general
- 12 lease right-of-way use to BHP Billiton LNG International
- 13 for construction, use, operation and maintenance of the
- 14 portion of the pipelines that will cross State sovereign
- 15 lands off shore of Ventura county.
- 16 This concludes the staff's presentation.
- 17 Thank you.
- 18 COMMISSIONER CHIANG: Thank you.
- 19 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION
- 20 CHIEF SANDERS: Commissioners, the next matter
- 21 before the Commission, the applicant, BHP Billiton, will
- 22 be making a presentation on the project to the Commission.
- 23 COMMISSIONER CHIANG: Very good. Thank you.
- 24 EXECUTIVE OFFICER THAYER: And Before BHP starts
- 25 its presentation, just as a housekeeping matter, we

1 noticed of course that the Commissioners can't see the

- 2 slides appropriately. We're trying to get a monitor up
- 3 here so that you'll have them directly, but I would also
- 4 invite anybody who has slides that they would like the
- 5 Commission to have copies of, we do have copies facilities
- 6 here. And if they could go to the front desk and ask
- 7 Linda Smallwood we can arrange to have copies made so that
- 8 they can be given to the Commissioners prior -- or at the
- 9 time of the presentation.
- 10 COMMISSIONER CHIANG: Thank you, Mr. Thayer.
- 11 MR. MOYER: Good morning. My name is Craig
- 12 Moyer. I'm with Manatt, Phelps & Phillips, representing
- 13 today the applicant. I've been told the applicant will
- 14 have 20 minutes to make its presentation. I'd like to
- 15 reserve ten minutes and make this a ten-minute
- 16 presentation.
- 17 (Thereupon an overhead presentation was
- 18 Presented as follows.)
- 19 MR. MOYER: First, I'd like to start by thanking
- 20 the staff for all of their work over the last three and a
- 21 half years and pushing this project to reduce its
- 22 environmental footprint so dramatically. This project is
- 23 a much less significant impact to the environment than it
- 24 was a few years ago. We haven't always agreed with staff,
- 25 but I think that there is no question about their

1 diligence, their work ethic, their willingness to push

- 2 this applicant very aggressively. And I think that the
- 3 very limited impacts of the project and -- were leading
- 4 aspects of this project demonstrate that. We've been
- 5 through three and a half years of process, dozens of
- 6 hearings and workshops, millions of man hours, and we've
- 7 got a truly world leading project.
- 8 Today, if this environmental impact -- if your
- 9 commission certifies the Environmental Impact Report, many
- 10 more decisions by many other agencies will need to be
- 11 done. It is an amazing process to this point.
- 12 Next slide, please.
- --000--
- 14 MR. MOYER: I'm going to very quickly march
- 15 through the Class 1 impacts and mitigation.
- Next slide, please.
- 17 --00o--
- 18 MR. MOYER: We've got a very conservative
- 19 document, Mr. Wolford mentioned early on and Cheryl
- 20 Karpowicz from E&E did a great job of describing the
- 21 remaining impacts. The one important point is that the 20
- 22 impacts that are referenced as Class 1 impacts are, in
- 23 fact, really -- many of the impacts have multiple Class 1
- 24 impacts. So I'd like to address that.
- Next slide, please.

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1 --000--
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- MR. MOYER: Next slide, please.
- 3 --000--
- 4 MR. MOYER: Cheryl talked about this so I'll go
- 5 on.
- 6 Next slide, please.
- 7 --00--
- 8 MR. MOYER: The main point on the impacts
- 9 associated with the release, I've broken out the impacts
- 10 of release in two categories. One associated with the LNG
- 11 itself out of the FSRU. The Independent Risk Assessment
- 12 indicates that an accidental collision would occur.
- 13 That's significant enough to cause a breach would be 1 in
- 14 every 417,000 years.
- 15 Obviously, the timing on an intentional release
- 16 couldn't be estimated because that's by definition
- 17 intentional.
- 18 Next slide.
- --000--
- 20 MR. MOYER: On pipelines, this is the impacts
- 21 associated with the pipeline. I thought it was also
- 22 helpful to put that in context. The older pipelines, the
- 23 one we're talking about are newer pipelines with much more
- 24 rigorous standards than are otherwise required. And
- 25 you're looking at one fatality in 100,000 miles of

1 pipeline. That's on the old historical. Ours would

- 2 be -- this would be expected to be much much lower.
- 3 Next slide, please.
- 4 --000--
- 5 MR. MOYER: Next slide please. That just kind of
- 6 combines it.
- 7 --00--
- 8 MR. MOYER: And then this is sort of the other
- 9 impacts. Four of those impacts are really limited to
- 10 sailors. Really, it's recreational boaters, but because
- 11 power boaters unless their engines were off would not be
- 12 expected to hear it. They would certainly be able to see
- 13 it. But the top four impacts are associated with people
- 14 who are already, you know, recreationally boating.
- 15 The one I'd like to focus on is the emissions of
- 16 ozone precursors from project emissions operating in
- 17 California coastal waters.
- 18 But before I do that, I'd like to just focus on
- 19 the safety impact that we talked about just awhile ago.
- 20 Among the many changes that were made here was to improve
- 21 the safety elements of this project. Calling it robust is
- 22 I think an under estimation. We've got double hulled with
- 23 the ballast in between, so it is very difficult to breach
- 24 the FSRU or an LNG carrier, but in particular the FSRU.
- The ozone precursors, what I wanted to focus on

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1 there is the reason that's still a significant impact is
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- 2 because CARB's estimate was that there's about a five ton
- 3 shortfall between the NOx emissions associated with the
- 4 FSRU, the carriers, the off-loading and everything else
- 5 associated with the project. So let me turn to that.
- --000--
- 7 MR. MOYER: Next slide.
- 8 --000--
- 9 MR. MOYER: Next slide.
- 10 --000--
- 11 MR. MOYER: Next slide.
- 12 --000--
- 13 MR. MOYER: We're going backwards, I think.
- 14 There we go.
- Next slide.
- 16 --000--
- MR. MOYER: All right. Just so that everyone's
- 18 on the same page, because there's a lot of other numbers
- 19 running around. I have no idea where the number that
- 20 you'll hear sometimes today will be 215, sometimes larger.
- 21 I don't know what those are. The NOx emissions associated
- 22 with the subject to the permitting 61.6. These are
- 23 numbers out of the Air Resources Board's letter I believe.
- 24 Sources plus vessels out to the federal water
- 25 boundaries NOx 109.7 and sources out to the California

1 coastal waters boundary 145.4. What BHP has done has

- 2 added an additional six tons in the last week. We've
- 3 secured six tons of banked Ventura County NOx emission
- 4 reduction credits. They were banked about eight years
- 5 ago. We are under contract from a current owner of the
- 6 banked NOx emission reduction credit to close that
- 7 perceived shortfall between -- next slide, please.
- 8 --000--
- 9 MR. MOYER: Well, actually this is a comparison
- 10 to Rule 26.2. We've got NOx emissions. If they were
- 11 required at all, you'd have to provide NOx emissions in
- 12 the amount of 1.3 to 180 tons. The project mitigation
- 13 package is 146.4 tons now, with the additional six tons of
- 14 ERC. So you're looking at a net environmental benefit of
- 15 66.3.
- Next slide.
- 17 --000--
- 18 MR. MOYER: Next slide.
- 19 --00o--
- MR. MOYER: One slide back.
- 21 --000--
- MR. MOYER: There we are.
- This is a comparison if hydrocarbons and NOx are
- 24 added together, you have 92.9 tons associated with the
- 25 stationary source the FSRU, meaning 120.8 tons reductions.

1 Here, 167 because the tug mitigation package, that Ms.

- 2 Karpowicz described earlier, will also reduce our ROCs.
- 3 We've got the six tons of emission reduction credits,
- 4 which again were acquired. Eight years ago they were
- 5 banked at a -- in Ventura county.
- 6 Next slide.
- 7 --000--
- 8 MR. MOYER: These are the elements that are
- 9 necessary -- when you have a mitigation package, an air
- 10 mitigation package, the emissions themselves must be real,
- 11 permanent, quantifiable, enforceable, in surplus. These
- 12 are terms of art that all air nerds understand. And I'd
- 13 like to go through them very quickly.
- 14 For real we have two tons --
- 15 --000--
- MR. MOYER: And, again, this will be exclusive of
- 17 the six tons of emission reduction credits. They are
- 18 already banked in Ventura County's bank. But let's talk
- 19 about the other 140 tons of NOx reductions. We've got two
- 20 tugs that are currently emitting 267 tons per year of NOx.
- 21 There's been actual testing on their baseline emissions,
- 22 and the new emission rates have been certified and tested
- 23 by EPA.
- 24 CHAIRPERSON GARAMENDI: Excuse me.
- MR. MOYER: If I can go through my

- 1 presentation --
- 2 CHAIRPERSON GARAMENDI: I do have a question.
- 3 MR. MOYER: Then could we stop the clock?
- 4 CHAIRPERSON GARAMENDI: I would ask the audience
- 5 to please keep their comments to themselves.
- 6 And when I have a question, it's on my time.
- 7 MR. MOYER: Thank you.
- 8 (Therepon audience members said they
- 9 couldn't hear.)
- 10 CHAIRPERSON GARAMENDI: Well, I don't control the
- 11 mikes here.
- 12 Thank you. It's on now.
- 13 You've been going through a series of numbers,
- 14 and I've been trying to keep track of those numbers. Do
- 15 you have a written document that you might share with us?
- MR. MOYER: Yes, we've provided that to staff.
- 17 CHAIRPERSON GARAMENDI: Well, perhaps the staff
- 18 could share it with those of us that will ultimately have
- 19 to make a decision.
- 20 (Applause.)
- 21 (Cheering.)
- 22 CHAIRPERSON GARAMENDI: Okay. Listen, folks.
- 23 That is the last of any demonstration in this room. I
- 24 will not allow it. And I know how to enforce it. So if
- 25 you want to stay in this room, you'll keep your hands

1 apart and you're mouths closed. All right, do we

- 2 understand the game?
- 3 All right?
- 4 If I could identify who said that, they could
- 5 leave the room. I will not have any demonstrations in
- 6 this room. End of the discussion. I will identify those
- 7 who do so and they will be leaving. Okay?
- 8 Now, let us continue with this.
- 9 Please continue, sir.
- 10 MR. MOYER: Thank you, Mr. Chairman.
- 11 Turning to the issue of permanence. There is the
- 12 precedent for using tug engines. Tug engine repowerings
- 13 were certified as permanent in the Otay Mesa facility.
- 14 Diesel engines, especially in this off-shore use,
- 15 last for many decades. BHP is replacing these with clean
- 16 diesel engines that are expected to last for well over 30
- 17 years and have been -- these particular tugs have been in
- 18 service for many decades themselves. So they are
- 19 permanent and have been established. We're not breaking
- 20 any new precedent here as to the permanence.
- 21 Quantifiable. As I mentioned earlier, we are
- 22 using real values to determine those emission decreases.
- 23 Carbon was, at Mr. Fletcher said earlier, involved and
- 24 applied several methodologies to verify the reductions.
- 25 And from those reductions the numbers that I ran through

1 ever so quickly earlier were the 140.4 tons of NOx and

- 2 20.6 tons of ROC reductions that are associated with the
- 3 mitigation package. By the way, the tugs will also reduce
- 4 diesel particulate by seven tons.
- 5 --000--
- 6 MR. MOYER: They're enforceable. They'll be
- 7 conditioned on the lease.
- 8 --000--
- 9 MR. MOYER: And there are no current requirements
- 10 to reduce the emissions from the long-haul tugs. No
- 11 regulations exist to address the marine controls that
- 12 we're talking about.
- --000--
- 14 MR. MOYER: Perhaps I should go back to the
- 15 slides that I went through so quickly, so that we can talk
- 16 about them a little more in case your Commission or others
- 17 have questions on that. It looks like my time has not
- 18 started running again, but I'm sure I've used up my ten
- 19 minutes at this time.
- 20 And I'll reserve the remaining ten minutes for
- 21 rebuttal.
- 22 CHAIRPERSON GARAMENDI: Just a question. Your
- 23 numbers are based on the air emissions or the emissions
- 24 that occurred within the 12 miles in the three miles
- 25 within what zone?

- 1 MR. MOYER: This chart, which we may be
- 2 challenged to see, addresses them at the different levels.
- 3 The source emissions, that is the FSRU itself, the loading
- 4 and unloading when -- or the hotelling emissions while
- 5 there is loading and unloading going on and the support
- 6 vessels in federal waters -- or is it State waters? --
- 7 total 61.6 tons.
- 8 When you add the LNG carriers in California
- 9 coastal waters, that's just the carriers, that takes it up
- 10 to the 109.7 tons, so you can see that that's up 48.1
- 11 tons.
- 12 CHAIRPERSON GARAMENDI: When you say California
- 13 coastal waters, those are 3 miles, 12 miles, 26?
- 14 MR. MOYER: Twenty-five miles. I could have Mr.
- 15 FLetcher come back if he -- it gets rather arcane,
- 16 especially when you add to the California coast -- the
- 17 federal water boundaries is 25 miles. When you go out to
- 18 the California coastal waters boundary, that's anywhere
- 19 from 80 -- it's 60 miles beyond and it could go up to 100
- 20 miles. It just so happens that where the carrier root, it
- 21 will be 88 miles out to California coastal waters.
- 22 CHAIRPERSON GARAMENDI: So the numbers that
- 23 you're presenting here are the emissions and the
- 24 mitigation for those emissions that are 88 miles off
- 25 shore?

1 MR. MOYER: Correct. The last number there, the

- 2 source and vessels out to California coastal waters
- 3 boundary, the NOx emissions total 145.4 tons per year.
- 4 CHAIRPERSON GARAMENDI: That's NOx. Carbon
- 5 dioxide other emissions?
- 6 MR. MOYER: Well, there are tons of ROCs as well,
- 7 hydrocarbons, which I don't know if we've calculated. But
- 8 I can tell you that for the FSRU, but I don't know if I
- 9 could tell you that for the California coastal waters.
- 10 CHAIRPERSON GARAMENDI: Greenhouse gas emissions?
- 11 MR. MOYER: Greenhouse gas emissions. Again, I
- 12 don't believe we've done any -- you could ask staff
- 13 calculation they've done on that issue.
- 14 CHAIRPERSON GARAMENDI: I believe greenhouse gas
- 15 emissions are now an issue before California.
- MR. MOYER: Greenhouse gas emissions are in the
- 17 Environmental Impact Report are not considered to be a
- 18 significant impact, because the carriers would be going
- 19 somewhere in any event. But there's no question, but that
- 20 climate change and greenhouse gas is a very significant
- 21 issue worldwide.
- 22 CHAIRPERSON GARAMENDI: Significant?
- 23 MR. MOYER: Climate change is perhaps the most
- 24 significant issue facing us as a species.
- 25 CHAIRPERSON GARAMENDI: Does this project reduce

- 1 or increase greenhouse gases?
- 2 MR. MOYER: I think that this project will have
- 3 no significant -- and I think that the document, as staff
- 4 has put it together, indicates that it will not have a
- 5 significant adverse impact on climate change.
- 6 CHAIRPERSON GARAMENDI: Speak to the EIR.
- 7 MR. MOYER: Does that --
- 8 CHAIRPERSON GARAMENDI: Does the EIR address the
- 9 greenhouse gas emissions?
- MR. MOYER: Yes, it does.
- 11 CHAIRPERSON GARAMENDI: Cheryl?
- MS. KARPOWICZ: Yes.
- 13 CHAIRPERSON GARAMENDI: In what way does it
- 14 address it?
- MS. KARPOWICZ: Can I have the mike on please.
- 16 CHAIRPERSON GARAMENDI: You do. It's on.
- 17 MS. KARPOWICZ: We have a section, and it's Table
- 18 4.6-14 of the document that --
- 19 CHAIRPERSON GARAMENDI: Which volume?
- 20 MS. KARPOWICZ: It's Volume 1. And in that
- 21 section we have a discussion of the greenhouse gas
- 22 emissions, both the total of carbon dioxide and methane
- 23 that would be emitted.
- 24 CHAIRPERSON GARAMENDI: The total project?
- MS. KARPOWICZ: Yes.

1 CHAIRPERSON GARAMENDI: Now, what do you mean by

- 2 the total project here?
- 3 MS. KARPOWICZ: The total project, as we've
- 4 defined it, is the emissions that are directly related to
- 5 the project, so it would be the FSRU, the carriers and
- 6 anything that's directly related to the project.
- We do not include the emissions from the actual
- 8 burning of natural gas at a powerplant or in people's
- 9 homes, because that is not part of the scope of our
- 10 document or project.
- 11 CHAIRPERSON GARAMENDI: Okay. So let's just
- 12 stick to what the total project is here for a moment. The
- 13 total project includes the drilling and the production of
- 14 the gas wherever that might be from?
- MS. KARPOWICZ: No, it doesn't include that.
- 16 CHAIRPERSON GARAMENDI: I see. Does it include
- 17 the liquefaction of the gas?
- 18 MS. KARPOWICZ: No, it doesn't, because --
- 19 CHAIRPERSON GARAMENDI: Does it include the
- 20 transportation of the gas from wherever it is coming to,
- 21 into or up to the if FSRU.
- MS. KARPOWICZ: No, it does not.
- 23 CHAIRPERSON GARAMENDI: So the total project then
- 24 only includes the ship at the dock or at the FSRU and the
- 25 gasification of the -- or the regasification of the LNG.

1 MS. KARPOWICZ: It also includes all vessels

- 2 operating in California coastal waters.
- 3 CHAIRPERSON GARAMENDI: So those would be the
- 4 tugs and the transportation?
- 5 MS. KARPOWICZ: LNG carriers, yes.
- 6 CHAIRPERSON GARAMENDI: And when operating in
- 7 California waters out there, I guess that's 88 miles, is
- 8 that it?
- 9 MS. KARPOWICZ: That's correct.
- 10 CHAIRPERSON GARAMENDI: So anything beyond 88
- 11 miles is not included?
- MS. KARPOWICZ: That's correct.
- 13 CHAIRPERSON GARAMENDI: So insofar as greenhouse
- 14 gases are concerned, it does not include the initial
- 15 obtaining of the natural gas, the liquefaction of it, and
- 16 the transportation of that gas to within 88 miles of
- 17 California?
- MS. KARPOWICZ: No, it does not.
- 19 CHAIRPERSON GARAMENDI: All right. And it does
- 20 not include anything with the burning or the consumption
- 21 of that gas in California?
- MS. KARPOWICZ: No, it does not.
- 23 MR. MOYER: Perhaps counsel could address why
- 24 that was? It's my understanding that that is because
- 25 those emission are not associated with this project. That

1 is that if the LNG doesn't come to California, it will go

- 2 somewhere else. That's not to say that there -- and, at
- 3 this point, the project has committed to use natural gas
- 4 in the California coastal waters, and that has been deemed
- 5 to be the maximum extent feasible beyond the coastal --
- 6 CHAIRPERSON GARAMENDI: Excuse me. You brought
- 7 something up when you said that. I've been led to believe
- 8 that the development of the gas field in western Australia
- 9 is specifically for this project. Is that not the case?
- 10 MR. MOYER: If California declines to accept the
- 11 project, the natural -- the exploration production will go
- 12 forward and it will go somewhere.
- 13 CHAIRPERSON GARAMENDI: And therefore we're not
- 14 to be concerned about the greenhouse gas effect?
- 15 MR. MOYER: That's beyond -- I think you should
- 16 be concerned about the greenhouse gas effect. And I think
- 17 that that's something that we can do to try to mitigate
- 18 the maximum extent feasible is something that I mentioned
- 19 earlier. Climate change is a serious issue and we should
- 20 try to address those issues as much as we can. It's not
- 21 an impact of this project.
- 22 If, however, you wish to discuss how -- what
- 23 additional measures can be and should be taken by the
- 24 applicant, as I've told staff over the last three and a
- 25 half years, BHP is anxious to discuss how best to make

- 1 this project --
- 2 CHAIRPERSON GARAMENDI: Neutral or positive on
- 3 greenhouse gas?
- 4 MR. MOYER: At least mitigate it to the maximum
- 5 extent feasible, yes, sir.
- 6 CHAIRPERSON GARAMENDI: Okay. Questions?
- 7 COMMISSIONER CHIANG: The cradle to gave, the
- 8 production of the natural gas, is it net positive or
- 9 negative with the use?
- 10 MR. MOYER: I'm sorry, could you repeat that?
- 11 COMMISSIONER CHIANG: It doesn't directly
- 12 associate the production of the natural gas, whether it's
- 13 in Australia or there's been discussion that it takes
- 14 place elsewhere. I'm not, in fact, sure if that's true or
- 15 not when you account for this is for greenhouse gas
- 16 emissions? You know, sort of the same discussion with
- 17 ethanol, is it net negative or net positive?
- 18 MR. MOYER: Well, to the extent that it backs out
- 19 things like coal, which again even here in California,
- 20 many of our electrons, although not produced here in
- 21 California, are produced by coal. And so the idea of a
- 22 project that increases natural gas, which is a fossil
- 23 fuel, but it has much less impact than coal. So if this
- 24 natural gas were to back out coal, I think it would have a
- 25 net positive effect on greenhouse gas.

1 COMMISSIONER CHIANG: And then the purchase of

- 2 the credits, I believe you said, was that last week? Was
- 3 that directly from a particular company or is that out of
- 4 the bank and is that a permanent purchase in the event
- 5 that we identify different standards that you will go out
- 6 and purchase more ERCs?
- 7 MR. MOYER: The six tons of emission reduction
- 8 credits come from one seller. And they are under contract
- 9 and they are currently banked. They are not being created
- 10 for this project. They're already sitting in the bank for
- 11 someone to use that.
- 12 COMMISSIONER CHIANG: Thank you.
- 13 CHAIRPERSON GARAMENDI: Does California have a
- 14 greenhouse gas banking law for regulation in place?
- 15 MR. MOYER: Not yet. There is the California
- 16 Climate Action Registry. But AB 32 and the rest of these
- 17 regulatory regimes are in the making.
- 18 CHAIRPERSON GARAMENDI: When would this project
- 19 be completed and on line if it were to be allowed?
- 20 MR. MOYER: Cheryl will have to remind me the
- 21 date in the EIR that we talk about. I think it's 2011,
- 22 but if you'll give me one second I'll get it.
- MR. MOYER: It could be 2011 or 2012, again
- 24 depending upon how -- a number of things including that
- 25 day.

1 CHAIRPERSON GARAMENDI: Well, the assumption was

- 2 that the project is allowed to go forward in an
- 3 expeditious manner could be, what that's, about five
- 4 years?
- 5 MR. MOYER: On line.
- 6 CHAIRPERSON GARAMENDI: On line in five years.
- 7 MR. MOYER: Well, I mean, it could be on line in
- 8 four or five years.
- 9 CHAIRPERSON GARAMENDI: Okay. That requires the
- 10 construction of a ship?
- 11 MR. MOYER: Correct. The FSRU, you mean?
- 12 CHAIRPERSON GARAMENDI: Yes.
- MR. MOYER: Yes.
- 14 CHAIRPERSON GARAMENDI: And the construction time
- 15 for that is how long?
- MR. MOYER: Forty-four months.
- 17 CHAIRPERSON GARAMENDI: Forty-four months. So
- 18 that's your longest period -- that's the single element
- 19 that has the longest period of time?
- MR. MOYER: Construction-wise, yes, sir.
- 21 CHAIRPERSON GARAMENDI: Okay. And this project
- 22 is said, by some, to be a bridge project, that is one that
- 23 would bridge California from our current reliance on
- 24 fossil fuels of all kinds to a renewable future?
- MR. MOYER: Well, the --

1 CHAIRPERSON GARAMENDI: Do you see it that way?

- 2 MR. MOYER: Well, the renewables will be a part
- 3 of the future. They have already been mandated by the
- 4 Legislature. We're already mandated to have 20 percent.
- 5 The Governor and others, yourself included, have made it
- 6 very clear that we will have renewables in our future. So
- 7 with or -- you know, without natural gas, we have to have
- 8 renewables.
- 9 I think the natural gas allows us to further
- 10 reduce our environmental footprint by allowing us to back
- 11 out things that are not currently clean burning, such as
- 12 coal.
- 13 CHAIRPERSON GARAMENDI: So this fuel is supposed
- 14 to be used to back out coal?
- 15 MR. MOYER: Among other things. It is, as the
- 16 California Energy Commission says, an alternative supply.
- 17 It's a matter of diversification of your natural gas
- 18 supply. And as far -- if I may go back to your question
- 19 about the bridge fuel. This project is one that is the
- 20 most definitionally a temporary project. It has a limited
- 21 life. The FSRU itself is -- the lease term is a 30-year
- 22 lease term. The project itself, the FSRU, is made so that
- 23 it is easy to decommission. It has almost, you know, very
- 24 little environmental impact associated with its movement
- 25 and decommission. So in that sense --

1 CHAIRPERSON GARAMENDI: So how long do you expect

- 2 the project to operate?
- 3 MR. MOYER: The project could go as long as 40
- 4 years. The project could go in 25 to 30 years. It
- 5 depends upon the market and many other things.
- 6 CHAIRPERSON GARAMENDI: Do the air emissions
- 7 quantifications go for 30 years?
- 8 MR. MOYER: Yes.
- 9 CHAIRPERSON GARAMENDI: IN the EIR, does it
- 10 anticipate a 30-year period of time or a 15-year period of
- 11 time?
- MR. MOYER: I believe it's 40.
- 13 MS. KARPOWICZ: In the EIR it's 40. And the
- 14 startup --
- 15 CHAIRPERSON GARAMENDI: For the air emissions.
- MS. KARPOWICZ: Well, the air emissions are
- 17 calculated on an annual basis, so we're assuming that they
- 18 would continue at the same rate over that period of time.
- 19 CHAIRPERSON GARAMENDI: But the numbers I think
- 20 are for 15 years not for 30 or 40 years.
- 21 MS. KARPOWICZ: Dwight, did you want to?
- 22 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION
- 23 CHIEF SANDERS: Mr. Chairman, it's my
- 24 understanding that the precise contracts that affect the
- 25 converted tugs have a term of 15 years. However, we are

1 working from a total number of offset tons. And that

- 2 amount would need to be provided over the life of the
- 3 project, and it would be enforceable through our
- 4 mitigation monitoring program, because that is one of the
- 5 mitigation measures.
- 6 So I guess what I'm indicating is the timing of
- 7 the contracts is a of lesser consequence than the total
- 8 amount of emissions that would be required on an annual --
- 9 reductions that would be required on an annual basis
- 10 throughout the life of the project.
- 11 CHAIRPERSON GARAMENDI: I'm sorry. I didn't
- 12 understand that.
- 13 MR. MOYER: Could I take a whack at that?
- 14 EXECUTIVE OFFICER THAYER: The problem is that
- 15 the initial contract for retrofitting the tugboats with
- 16 the lower emission emitting engines for 15 years. But
- 17 it's staff's perspective we could legally correct, that
- 18 the requirement that's being imposed -- the mitigation
- 19 requirement is for a certain number of tons. And so when
- 20 those contracts expire at the end of 15 years, if they're
- 21 not renewed, then they would have to obtain new contracts
- 22 either with those tugs or additional tugs, so that there
- 23 would be an ongoing emission credit or emission reduction
- 24 in that area. But the 15-year figure, I believe, applies
- 25 specifically to the contracts they have right now with the

1 tugs, but it doesn't limit the application of the issue.

- 2 CHAIRPERSON GARAMENDI: Does the EIR take into
- 3 account the utility company's 2006 estimate of natural gas
- 4 requirements?
- 5 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION
- 6 CHIEF SANDERS: Mr. Chairman, I think Pat can
- 7 also add to this, but the basis for the energy supply
- 8 demand is the 2005 report of the California Energy
- 9 Commission as it was updated, that is the latest
- 10 information of that type that's available through that.
- 11 CHAIRPERSON GARAMENDI: So the 2006 utility
- 12 company estimates of natural gas demand for the next ten
- 13 years, that's until 2016 is not part of the EIR; is that
- 14 correct?
- MS. KARPOWICZ: That's correct.
- 16 CHAIRPERSON GARAMENDI: Why is it not part of the
- 17 EIR? Is it not relevant?
- 18 MS. KARPOWICZ: No, it's not that it's not
- 19 relevant. It's that the EIR uses the energy action plan
- 20 and other publicly -- other information that's been
- 21 through the public process and approved by both agencies
- 22 as the basis for the analysis.
- 23 CHAIRPERSON GARAMENDI: So the utility company's
- 24 estimate is not useful or accurate or --
- MS. KARPOWICZ: Well, it's potentially not

1 accurate. It's not been through a public process to vet

- 2 it.
- 3 CHAIRPERSON GARAMENDI: Is there any other thing
- 4 in the EIR that has not been through the public process?
- 5 MS. KARPOWICZ: Nothing that important.
- 6 CHAIRPERSON GARAMENDI: I see. So the estimate
- 7 that has been made by the utility companies for natural
- 8 gas need in the state of California is not useful,
- 9 reliable, correct, is that what I'm -- that's what I hear
- 10 you saying, simply because it hasn't been through the
- 11 public process?
- 12 MS. KARPOWICZ: Well, I think that we thought it
- 13 was better to rely on a document that represents the work
- 14 of both agency staff and public comments in our analysis
- 15 because it would be more valid than a range of other sorts
- 16 of documents.
- 17 CHAIRPERSON GARAMENDI: I see. Then the analysis
- 18 relies upon a 2003 estimate of gas supply needs for the
- 19 State of California; is that correct?
- 20 MS. KARPOWICZ: To the extent that the 2005 --
- 21 CHAIRPERSON GARAMENDI: Well, why don't you tell
- 22 us you to what extent the 2005 California Energy
- 23 Commission report is based upon 2003 estimates of need.
- 24 The answer is totally, correct?
- 25 MS. KARPOWICZ: I think maybe the Energy

- 1 Commission should respond.
- 2 CHAIRPERSON GARAMENDI: Well, you wrote the
- 3 report.
- 4 MS. KARPOWICZ: Yes.
- 5 CHAIRPERSON GARAMENDI: Yes or no? It is, in
- 6 fact, the case, is it not?
- 7 MS. KARPOWICZ: I can't say that it's totally. I
- 8 do know that it was heavily relied on. I can't say that
- 9 it was totally relied on and that there was no other
- 10 input.
- 11 CHAIRPERSON GARAMENDI: We'll settle on the word
- 12 heavily relied on then.
- MS. KARPOWICZ: Yes.
- 14 CHAIRPERSON GARAMENDI: Now, that is four years
- 15 old; is that correct? I think, that's about right.
- 16 Three, yeah, about four years, three and a half.
- MS. KARPOWICZ: My math agrees with yours.
- 18 CHAIRPERSON GARAMENDI: Three and a half years
- 19 old, and does not -- and therefore cannot take into
- 20 account any recent policy developed in the State of
- 21 California with regard to conservation, alternative
- 22 renewables, and the rest; is that correct?
- MS. KARPOWICZ: Well, it's my understanding that
- 24 the Energy Commission does and has considered renewables
- 25 and conservation in their projections of need in terms of

- 1 the Energy Action Plan.
- 2 CHAIRPERSON GARAMENDI: But the 2005 report,
- 3 which is the basis for the needs question, could not take
- 4 into account recent California policy, which has occurred
- 5 since 2005?
- 6 MS. KARPOWICZ: Well, that's correct of course.
- 7 CHAIRPERSON GARAMENDI: Yes, of course, it is
- 8 right.
- 9 And therefore the foundation for the needs
- 10 assessment is, in fact, based upon old data and old
- 11 estimates, which, 1, do not take account of the current
- 12 public policies as stated both in law and Gubernatorial
- 13 Executive Orders, and does not take into account the most
- 14 recent estimate by the utility companies themselves as to
- 15 the need for additional natural gas supplies; is that
- 16 correct?
- MS. KARPOWICZ: Yes.
- 18 CHAIRPERSON GARAMENDI: Thank you.
- 19 COMMISSIONER CHIANG: Well, short and simple,
- 20 we're using old numbers.
- 21 CHAIRPERSON GARAMENDI: You get right to the
- 22 point don't you?
- 23 ACTING COMMISSIONER SHEEHAN: Can I ask a
- 24 question.
- 25 COMMISSIONER CHIANG: We're using old numbers,

1 and then we're undertaking a study to identify what the

- 2 new need would be.
- 3 MS. KARPOWICZ: Yes, that's correct.
- 4 EXECUTIVE OFFICER THAYER: If I could respond to
- 5 some of his questions. I think the reason the Energy
- 6 Commission's numbers were used in terms of why not --
- 7 (Thereupon members of the audience could
- 8 not hear.)
- 9 EXECUTIVE OFFICER THAYER: How about now?
- 10 Better?
- 11 I think the reason that the Energy Commission
- 12 numbers were used is because there are a variety of
- 13 numbers out there, and some of the opponents to the
- 14 project and other entities have come up with a variety of
- 15 estimates, but it seems that the Energy Commission was the
- 16 assigned public entity to come up with unbiased numbers
- 17 and do energy planning for the state. There certainly are
- 18 conflicts both with the utility estimates and with other
- 19 estimates that people in good faith come up with, but that
- 20 seemed to be a good starting point.
- 21 The information we have from Pat Perez -- who I
- 22 think he's still around -- could elucidate this better,
- 23 was that even the 2005 report was based in part on the
- 24 2003 report. It was still their best estimate in the 2005
- 25 of what the demand was going to be in the future. But I

- 1 think Pat will totally agree with the Commissioners that
- 2 that data is two years old, and, as his presentation went
- 3 into, there have been changes. And so I think the Energy
- 4 Commission staff would agree that the process being gone
- 5 through this year that will lead to the 2007 report will
- 6 be better. Although, even Pat's testimony indicated that
- 7 it won't yet reflect totally the effect of AB 32, because
- 8 those regulations won't be adopted by the Air Resources
- 9 Board until 2011.
- 10 So it's a reiterative process after awhile. But
- 11 what we're using is 2005 data from the Energy Commission
- 12 that we think was valid at that time. It's the best data
- 13 from the energy experts that work for the State, but it is
- 14 certainly limited. And undoubtedly the 2007 report will
- 15 look different.
- 16 CHAIRPERSON GARAMENDI: Anne.
- 17 ACTING COMMISSIONER SHEEHAN: I guess the
- 18 question I have is we use what is the most -- what is the
- 19 most up to date and, you know, certified information from
- 20 the Energy Commission. It is a constantly dynamic
- 21 changing market. Annually, the numbers are going to
- 22 change. So in order to get the equal numbers, because we
- 23 have to use it at a point in time in order to get the
- 24 process to move forward for this.
- 25 So while -- I mean it's changing as we speak

1 right now in terms of energy uses in the state. But I

- 2 think as Paul said, we had to use what the Energy
- 3 Commission have was -- what we could get in terms of what
- 4 were the most reliable figures at the time.
- 5 MS. KARPOWICZ: I think that's correct. And also
- 6 I would like to point out that we did take into account
- 7 the electric utilities, in the sense that we looked at the
- 8 signed contracts that they have for renewable capacities
- 9 since 2002. And that information came to us from the
- 10 Energy Commission in 2006.
- 11 So that is more recent. And so to the extent
- 12 that gas consumption is reflected in the electricity
- 13 -- the electric utilities renewable portfolios, then we
- 14 have considered that in the document.
- 15 So there is a section in Chapter 1 that addresses
- 16 it. It comes from the Energy Commission that identifies
- 17 how renewable energy has been incorporated in their
- 18 projections and their analysis.
- 19 ACTING COMMISSIONER SHEEHAN: Well, and I guess
- 20 one other clarification is, yes, the Governor signed AB
- 21 32. The Air Board is currently now going through the
- 22 regulatory process. But that still will take -- I don't
- 23 know if the Air Board gentleman is still here. I know
- 24 from my experience, that's still going to take a little
- 25 while to develop those full regulations to put those

1 targets into place and then to develop the mechanisms to

- 2 achieve those, because it was just signed last year.
- 3 MS. KARPOWICZ: Yes, that's correct.
- 4 ACTING COMMISSIONER SHEEHAN: And the Air Board
- 5 is quickly going through the regulatory process.
- 6 MS. KARPOWICZ: And this is actually one of the
- 7 first documents that discloses the amount of greenhouse
- 8 gas emissions that are related to the project.
- 9 ACTING COMMISSIONER SHEEHAN: Thanks.
- 10 CHAIRPERSON GARAMENDI: Any questions, John?
- 11 COMMISSIONER CHIANG: Yes. Following up on your
- 12 line of questioning regarding the use of the tugs. If we
- 13 do strict compliance with 26.2, we would include the tugs,
- 14 because they're not permanent, even though there's a
- 15 contract and legally you think that you could use --
- 16 continue to require the petitioner to seek additional
- 17 contracts, that those tug contracts, at this point in time
- 18 are not permanent.
- 19 EXECUTIVE OFFICER THAYER: I think the situation
- 20 undoubtedly would be changed if the on-shore rules were
- 21 applied. There are a variety of different requirements
- 22 that occur in that context. But again, if the tug
- 23 emissions are considered to be mitigation that they're not
- 24 limited by the contract. In other words, we're
- 25 imposing -- the Commission is imposing a CEQA requirement

1 that these reductions occur, and their 15-year approach to

- 2 how to deal with that are these tugboats, but we're not
- 3 accepting that as ultimate compliance, they'll have to
- 4 then continue to meet that requirement. So it's a
- 5 performance standard, if you will, that they've met so far
- 6 with the 15-year contract.
- 7 But tugs die. One of these might sink even in
- 8 less than 15 years, they'd still be on the hook for both
- 9 the 15 years and the longer period of time to meet these
- 10 reductions.
- 11 But in terms of changing air quality
- 12 applications, I'm not sure, and we would need, I think,
- 13 either the California Air Resources Board to explain some
- 14 or somebody work on that for the Environmental Impact
- 15 Report.
- 16 COMMISSIONER CHIANG: Thank you.
- 17 CHAIRPERSON GARAMENDI: Sir, a couple of
- 18 additional questions. I'd asked earlier about the length
- 19 of time to build the FSRU as it related to the issue of a
- 20 bridge, that is this LNG is necessary as a bridge. In
- 21 your presentations to us prior to this meeting, you
- 22 indicate that LNG is a bridge to a renewable energy
- 23 future. In that presentation you do not tell us how long
- 24 that bridge is going to be in place. Do you have some
- 25 sense of that?

- 1 MR. MOYER: The --
- 2 CHAIRPERSON GARAMENDI: Let me just frame the
- 3 issue even more so, because I'm trying to understand when
- 4 your project comes on line, you said perhaps it would be
- 5 2011 or 2012 and it takes 44 months for the FSRU to be
- 6 built. I assume that means that you start the FSRU on
- 7 completion of this process, which I think is about, I
- 8 don't know, 120 days or so; is that correct? So you'd
- 9 immediately begin construction of the FSRU, so we'd be
- 10 looking at 44 months beyond mid-summer?
- 11 MR. MOYER: It wouldn't be started right at the
- 12 end of this process, no. I mean, you'd have to do some
- 13 more detailed engineering to know exactly what you were
- 14 getting.
- 15 CHAIRPERSON GARAMENDI: So that additional
- 16 engineering is not included in the 44 months?
- 17 MR. MOYER: That's correct. That's the
- 18 construct.
- 19 CHAIRPERSON GARAMENDI: I understand that most
- 20 every shipyard is full building those 100 additional
- 21 tankers.
- MR. MOYER: Right.
- 23 CHAIRPERSON GARAMENDI: And you have to have
- 24 space or I guess reserve a slot.
- MR. MOYER: That's correct.

1 CHAIRPERSON GARAMENDI: Have you reserved a slot?

- 2 MR. MOYER: No. The company has been in
- 3 discussions with each of the places where it can be
- 4 located or where it could be --
- 5 CHAIRPERSON GARAMENDI: How long do you suppose
- 6 it would be for a slot to be obtained and the 44 months to
- 7 begin running?
- 8 MR. MOYER: I'm sure that the company can get the
- 9 project constructed in time to have it in place given
- 10 where the production -- exploration and production is and
- 11 timing on the ultimate permitting. And that's how you get
- 12 to that 2011/2012 timeframe.
- 13 CHAIRPERSON GARAMENDI: So has production been
- 14 started in western Australia?
- 15 MR. MOYER: There's exploration that's going on,
- 16 not production.
- 17 CHAIRPERSON GARAMENDI: I see. Do you intend to
- 18 use a floating drilling platform or a permanent
- 19 attached-to-the-floor platform?
- 20 MR. MOYER: I don't know the answer to that
- 21 question.
- 22 CHAIRPERSON GARAMENDI: Has a gasification --
- 23 excuse me, liquification facility been --
- 24 MR. MOYER: There would be a liquefaction
- 25 facility that would need to be constructed.

- 1 CHAIRPERSON GARAMENDI: Is that --
- 2 MR. MOYER: And so the gas would just be coming
- 3 out of the ground in gaseous form.
- 4 CHAIRPERSON GARAMENDI: I understand the field is
- 5 about 170 miles off shore.
- 6 MR. MOYER: Yeah, that's kilometers. I think you
- 7 have -- that number that you have is kilometers.
- 8 CHAIRPERSON GARAMENDI: And how would the gas
- 9 be -- would it be liquefied in the ocean -- on the ocean
- 10 or would it be --
- 11 MR. MOYER: No, it would be piped -- we would
- 12 have a pipeline that would bring it to one location. That
- 13 location that we chose.
- 14 CHAIRPERSON GARAMENDI: Now, is that also
- 15 included in this issue of 44 months or is that in addition
- 16 to or separate from or --
- 17 MR. MOYER: It is not on that same track. It's
- 18 on parallel tracks. You would be doing exploration and
- 19 production on the one hand and this Cabrillo Port facility
- 20 on the other.
- 21 CHAIRPERSON GARAMENDI: And they are in
- 22 synchronization?
- MR. MOYER: They are.
- 24 CHAIRPERSON GARAMENDI: So that at the end of 44
- 25 months the gas lives?

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1 MR. MOYER: It would be very nice to think that
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- 2 that could happen that way, but I'm sure we both know that
- 3 the projects rarely go so smoothly so that they are timed
- 4 on the same day to begin.
- 5 CHAIRPERSON GARAMENDI: So that the bridge is not
- 6 entered upon until a minimum of four years?
- 7 MR. MOYER: This project will not be on line
- 8 before 2011 that is that correct, sir?
- 9 CHAIRPERSON GARAMENDI: And you have no real
- 10 estimate of exactly when it would be on line thereafter
- 11 because of all these contingencies?
- 12 MR. MOYER: When you say exactly, I think we've
- 13 put it in the 2011/2012 timeframe. And as the engineering
- 14 becomes more refined, then we can come to a more exact
- 15 date and probably could do that within a matter of months.
- 16 CHAIRPERSON GARAMENDI: I'm trying to understand
- 17 this bridge as it relates to the demand for natural gas,
- 18 which the utility companies tell us is going to be flat
- 19 for the next ten years. So I'm kind of curious exactly
- 20 when and how this gas, this LNG, fits into that?
- 21 MR. MOYER: A couple of thoughts on that
- 22 response. One of the things the Energy Commission and
- 23 this and staff's Environmental Impact Report point out is
- 24 that a project that brings in additional natural gas
- 25 supply is good from a purely a perspective of

1 diversification. Even if you did not believe, and I do,

- 2 that natural gas usage will increase even if you thought
- 3 it were to decline, isn't it a smart idea not to be at the
- 4 end of the pipe where diminishing reserves are our only
- 5 source from Canada to the Rocky Mountains and the Gulf
- 6 coast?
- 7 CHAIRPERSON GARAMENDI: Did you forget about
- 8 Baja?
- 9 MR. MOYER: The facilities in -- the LNG facility
- 10 in Baja is expected to use most of that natural gas in
- 11 Mexico.
- 12 CHAIRPERSON GARAMENDI: Where did you get that
- 13 information?
- MR. MOYER: Well --
- 15 CHAIRPERSON GARAMENDI: I would assume you'd be
- 16 curious about that fact.
- 17 MR. MOYER: I think we've done -- the market
- 18 analysis is that the need -- that Mexico continues to be a
- 19 net importer of natural gas. And I don't think that we
- 20 should assume that we'll be able to bid away that natural
- 21 gas from that facility. I don't think they're
- 22 constructing it so that they can supply all of the natural
- 23 gas to -- but you'd have to talk to Sempra about that.
- 24 CHAIRPERSON GARAMENDI: I have a question for
- 25 Cheryl, if I could. Does the EIR spend -- does the EIR

- 1 analyze the Sempra project?
- 2 MS. KARPOWICZ: We include information about the
- 3 Sempra project in the alternatives section in Chapter 3.
- 4 CHAIRPERSON GARAMENDI: I see, could you
- 5 summarize that, please.
- 6 MS. KARPOWICZ: Well, our understanding is that
- 7 some part of the --
- 8 CHAIRPERSON GARAMENDI: Excuse me. Before you
- 9 begin that, could you refer me to that portion of the EIR
- 10 that --
- MS. KARPOWICZ: Yes, I'd be happy to.
- 12 CHAIRPERSON GARAMENDI: -- has that.
- 13 MS. KARPOWICZ: It would be Section 3.3.5.
- 14 CHAIRPERSON GARAMENDI: Which volume?
- MS. KARPOWICZ: Volume 1.
- 16 CHAIRPERSON GARAMENDI: Volume 1.
- MS. KARPOWICZ: Yes, it would be page 3-11 in
- 18 Chapter 3.
- 19 CHAIRPERSON GARAMENDI: Please continue.
- 20 MS. KARPOWICZ: The Sempra project is proposed to
- 21 have a capacity of 1,000 -- well, a billion cubic feet per
- 22 day. However, it could be expanded and to increase the
- 23 capacity with a peak of 2.6 billion per day. Once the
- 24 operations begin, Sempra/Shell anticipates that about half
- 25 a billion per day would be used to serve the needs of

1 Mexico, and the remainder would serve the south western

- 2 U.S.
- 3 CHAIRPERSON GARAMENDI: So the present capacity
- 4 is 800?
- 5 MS. KARPOWICZ: The present capacity is -- yeah.
- 6 CHAIRPERSON GARAMENDI: Eight hundred million
- 7 cubic feet.
- 8 MS. KARPOWICZ: No, I think the present capacity
- 9 is about a billion.
- 10 CHAIRPERSON GARAMENDI: All right. And Mexico
- 11 anticipates?
- 12 MS. KARPOWICZ: Using about half of that or half
- 13 a billion.
- 14 CHAIRPERSON GARAMENDI: So maybe there's 500,000
- 15 -- 500 million cubic feet available capacity?
- MS. KARPOWICZ: That's correct.
- 17 CHAIRPERSON GARAMENDI: And that's for somewhere
- 18 in the southwest, including southern California.
- MS. KARPOWICZ: Yes, sir.
- 20 CHAIRPERSON GARAMENDI: What's the capacity of
- 21 the Cabrillo project?
- 22 MR. MOYER: Eight hundred million cubic feet
- 23 average.
- 24 CHAIRPERSON GARAMENDI: So roughly two-thirds or
- 25 less than two-thirds.

1 EXECUTIVE OFFICER THAYER: Mr. Chair, if I may?

- 2 CHAIRPERSON GARAMENDI: Yes.
- 3 EXECUTIVE OFFICER THAYER: To further flesh out
- 4 the direction that you're going, as the Chair probably
- 5 knows, we're in the middle of preparing an Environmental
- 6 Impact Report for a gas pipeline that would assist moving
- 7 Mexican gas north of the border to California or Arizona.
- 8 So the proponents of that project are working on that
- 9 specifically for the possibility of bringing gas in from
- 10 Mexico. So it's more than just theoretical, they're going
- 11 through that now.
- 12 CHAIRPERSON GARAMENDI: Does the EIR take that
- 13 into account?
- In fact, it does not; is that correct?
- 15 The Environmental Impact Report before us does
- 16 not take into account that the State Lands Commission is
- 17 in the process of finalizing the EIR that would allow
- 18 additional gas to flow from the Sempra plant across the
- 19 California -- across the United States border and hook up
- 20 with the pipelines that supply gas to California; is that
- 21 correct?
- 22 MS. KARPOWICZ: No, sir. We do acknowledge that
- 23 fact in the document. Well, it's right in the same
- 24 chapter where we were just discussing those.
- 25 CHAIRPERSON GARAMENDI: And what effect does that

- 1 have on the supply of gas to California?
- 2 MS. KARPOWICZ: Well, that would depend on if it
- 3 comes to California or if it goes to one of the other
- 4 areas.
- 5 CHAIRPERSON GARAMENDI: I suppose the EIR
- 6 then -- this EIR then discusses the need to retrofit the
- 7 El Paso facility so the gas can flow eastward when
- 8 presently it only can flow westward? I suppose, that's
- 9 discussed in this EIR.
- 10 It's not.
- 11 Okay.
- 12 ACTING COMMISSIONER SHEEHAN: Can I ask --
- 13 CHAIRPERSON GARAMENDI: Excuse me, for a moment,
- 14 Anne, then, if I might just complete this thought.
- 15 The discussion concerning the Sempra facility and
- 16 the potential for Sempra to supply gas to California
- 17 appears to me to be somewhat incomplete.
- 18 Anne, you had a question.
- 19 ACTING COMMISSIONER SHEEHAN: Yes. I just have
- 20 question. Does the staff know, apart from the Energy
- 21 Commission, does California have any contracts that we
- 22 know of with the Sempra facility? Have they -- do we have
- 23 any assurance that gas is coming to California?
- 24 EXECUTIVE OFFICER THAYER: No.
- 25 ACTING COMMISSIONER SHEEHAN: No. Okay. So it

- 1 may come. It may not come. We're hopeful, because I
- 2 think the more supply in terms of to meet our immediate
- 3 needs while we move into some other alternatives would be
- 4 good. But we have no assurance that that gas is coming to
- 5 California. We know, you know, it stands a good chance,
- 6 but there are no signed contracts, Dwight, is that what
- 7 you --
- 8 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION
- 9 CHIEF SANDERS: We are not aware of any contracts
- 10 that, for example the pipeline. The Baja pipeline company
- 11 has the folks to receive gas ultimately come through that
- 12 system.
- 13 ACTING COMMISSIONER SHEEHAN: Okay, but we do
- 14 know for this project, the gas would come to the
- 15 California utilities.
- MR. MOYER: That's correct.
- 17 CHAIRPERSON GARAMENDI: Excuse me. On that
- 18 point, do you have contracts for the delivery of gas to
- 19 anybody, any entity in California or beyond?
- 20 MR. MOYER: There are letters of interest with
- 21 users in California that exceed the capacity of the
- 22 facility. It would not be commercially prudent to enter
- 23 into contracts to provide natural gas for a facility that
- 24 hasn't yet been permitted.
- 25 CHAIRPERSON GARAMENDI: So with regard to my

1 colleague's comments, the situation, your situation is

- 2 similar to Sempra's situation in that there are no
- 3 contracts.
- 4 MR. MOYER: Logistically, there is only one place
- 5 this natural gas can go and that's into the California
- 6 system.
- 7 CHAIRPERSON GARAMENDI: In your testimony a few
- 8 moments ago you said to California and beyond. Now,
- 9 you're telling me it's only for California.
- 10 MR. MOYER: The natural gas is for California.
- 11 The electrons and the other fossil fuels that would be
- 12 backed out would have extra territorial impacts into those
- 13 coal-burning and other plants that are constructed east of
- 14 California.
- 15 CHAIRPERSON GARAMENDI: I'm sorry. I don't
- 16 understand how that works. So the gas would have to be
- 17 transported out of California?
- 18 MR. MOYER: No.
- 19 CHAIRPERSON GARAMENDI: But the gas that would
- 20 otherwise come to California is going to wind up
- 21 repowering those coal plants?
- MR. MOYER: Correct.
- 23 CHAIRPERSON GARAMENDI: And those coal plants
- 24 will then deliver electrons to California?
- MR. MOYER: Without burning coal to get there.

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1 CHAIRPERSON GARAMENDI: Is that in the EIR?
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- 2 It's not.
- 3 Okay.
- 4 But it seems to be an important point.
- 5 My analysis, it's an important point.
- 6 MR. MOYER: That makes it an important point.
- 7 (Laughter.)
- 8 CHAIRPERSON GARAMENDI: It makes it a very
- 9 important point.
- 10 (Laughter.)
- 11 CHAIRPERSON GARAMENDI: With regard to the
- 12 Mexican project, apparently Mexico is going to use half of
- 13 the gas. Do we have any information about how much gas
- 14 Mexico currently imports for its current facilities?
- In fact, the EIR does not speak to that.
- So we know that Mexico imports gas. We don't
- 17 know how much it imports. We think they're going to use
- 18 500,000 of the potential billion -- excuse me 500 million
- 19 of that potential billion. And so there's additional
- 20 capacity. And I believe the EIR does say that they intend
- 21 to expand, basically more than doubling the capacity.
- 22 They have an application into double -- what 2.25.
- 23 MR. KARPOWICZ: That's correct. They do have an
- 24 application, but they communicated with the Energy
- 25 Commission and indicated that they won't make a decision

- 1 about that for two years.
- 2 CHAIRPERSON GARAMENDI: For two years?
- 3 MS. KARPOWICZ: Yes.
- 4 CHAIRPERSON GARAMENDI: What is the construction
- 5 time if they do make that application?
- 6 MS. KARPOWICZ: I would say it's probably -- just
- 7 based on the construction rate for the existing plan, it's
- 8 probably a couple years.
- 9 CHAIRPERSON GARAMENDI: So it's approximately the
- 10 same as the completion of this project should this project
- 11 go forward?
- MS. KARPOWICZ: Yes, sir.
- 13 CHAIRPERSON GARAMENDI: Paul, could you tell me
- 14 what the capacity is for the pipeline that is for the EIR?
- 15 I think it's the Trans-Canada pipeline?
- 16 EXECUTIVE OFFICER THAYER: The North Baja
- 17 pipeline?
- 18 CHAIRPERSON GARAMENDI: Yes, the current we're
- 19 working on.

- 21 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION
- 22 CHIEF SANDERS: It would double, sir, the
- 23 capacity of the existing line. And the existing line
- 24 currently has a capacity of 500 million cubic feet per
- 25 day.

1 CHAIRPERSON GARAMENDI: So potentially Mexico

- 2 could wind up with all the gas that they need from the
- 3 Sempra facility and an additional capacity of 500 million
- 4 cubic feet. Now, should the pipeline be expanded -- wait
- 5 a minute, the pipeline could handle that since Mexico
- 6 doesn't need to import on that pipeline. So that pipeline
- 7 could handle the current 500,000 unused -- excuse me, I
- 8 said thousand. Please excuse me. Just call that million.
- 9 Go back and change all those, would you, please.
- 10 (Laughter.)
- 11 CHAIRPERSON GARAMENDI: Five hundred million
- 12 cubic feet per day.
- 13 And should we approve the EIR on the pipeline, it
- 14 would provide a billion, which then is twice what Mexico
- 15 currently uses.
- 16 COMMISSIONER CHIANG: Can I ask a question. Are
- 17 we at capacity for that pipeline?
- 18 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION
- 19 CHIEF SANDERS: No, sir. The current information
- 20 that we have, in fact, from as recently as a couple of
- 21 weeks ago from the Energy Commission indicate that gas --
- 22 approximately 265 million cubic feet of gas per day are
- 23 going south into Mexico via the existing north Baja
- 24 pipeline, which has the capacity of, as we indicated, 500
- 25 million cubic feet per day.

1 COMMISSIONER CHIANG: For the contracts, the ones

- 2 that currently exist for usage in Mexico, are they legally
- 3 executed contracts? Do we know, are they legally
- 4 committed? And then let me explain my line here. What
- 5 I'm trying to do is I'm trying to get at the pricing
- 6 mechanism, I mean, that they're legally bound to use that
- 7 development in Mexico. For instance, if they could make
- 8 significantly more profit here in the United States, would
- 9 they change how much they allocate?
- 10 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION
- 11 CHIEF SANDERS: I'm not aware of the answer to
- 12 that, Commissioner. We have been told by the Energy
- 13 Commission staff that utilities in Mexico have contracted
- 14 for the 500 -- for approximately 500 million cubic feet
- 15 per day from the Phase 1 development of the Shell/Sempra
- 16 facility, which is approximately 50 percent of that
- 17 facility's capacity. That, as we've indicated, could be
- 18 doubled, but in approximately four years.
- 19 COMMISSIONER CHIANG: And then so that I have a
- 20 better sense of what has taken place in the southwest, do
- 21 we see a significant pricing differential for the cost of
- 22 the natural gas in the event that they do create a
- 23 pipeline going into the southwest states, and here in
- 24 southern California versus what would take place in
- 25 Arizona or elsewhere?

1 ENVIRONMENTAL PLANNING AND MANAGEMENT DIVISION

- 2 CHIEF SANDERS: We have no information on the
- 3 pricing, Commissioner. It sounds trite, but it's market
- 4 driven.
- 5 EXECUTIVE OFFICER THAYER: Although, the Energy
- 6 Commission staff, Pat Perez, has opined that the
- 7 increasing demand from the midwest and the east is
- 8 likely -- which is projected at higher rates than
- 9 California's own demand, is likely to create an increased
- 10 demand on the sources that we use. So, you know, western
- 11 Colorado surplus gas could end up going east where they
- 12 now go west.
- 13 A couple other clarifying points. In terms of
- 14 the question about how much Mexico imports right now, the
- 15 figure that Dwight gave is not necessarily comprehensive,
- 16 but it certainly indicates that right now they're
- 17 importing that 265 million on the pipeline. And I think
- 18 that's only half the capacity of that, which leads to the
- 19 possibility at least, technically, that that pipeline
- 20 could be used bi-directionally and there would be some of
- 21 that gas into California.
- 22 And the other issue that I wanted to explore a
- 23 little bit because the Chair had raised this as to the
- 24 start-up time for the BHP project. I had understood in
- 25 the last couple weeks that there was a reassessment of

- 1 what that was and that the actual start-up date
- 2 potentially was later more like 2013. And since it's of
- 3 concern to the Commission about whether or not this is
- 4 going to be a rapidly achieved bridge, I wonder if you
- 5 could comment on that.
- 6 MR. MOYER: Our internal estimates are still
- 7 2011/2012. It is possible -- and I should also clarify
- 8 that that 44 month timeframe that we -- that I mentioned
- 9 earlier is the beginning of fabrication to being on line
- 10 here in California, not just the construction.
- 11 And on the need issue, it's certainly not for the
- 12 applicant to say whether or not the State of California
- 13 needs this facility. But since you were mentioning the
- 14 global warming issues, natural gas -- there will be
- 15 increasing pressure on current reserves of natural gas
- 16 since it is a more clean burning greenhouse gas than coal.
- 17 And that's why I kept going back to that issue, that
- 18 you'll see others pressure that. And I think the
- 19 diversification of supply that the Energy Commission makes
- 20 has some significance.
- 21 CHAIRPERSON GARAMENDI: The principal argument
- 22 here for the facility is diversification of supply.
- 23 MR. MOYER: It is not for the applicant to tell
- 24 you whether you need this facility. I think the
- 25 Environmental Impact Report does a more thorough job of

1 need, but it is their document. It is not the applicant's

- 2 document, Mr. Chairman.
- 3 CHAIRPERSON GARAMENDI: I'm astounded by that.
- 4 You're telling me that it's not for the applicant to
- 5 determine whether there's a need for the project?
- 6 MR. MOYER: We absolutely -- the company would
- 7 not be on this path if it did not see a marketplace here.
- 8 There's no question. And if you believed that the market
- 9 should -- you know, those of us who believe that the
- 10 market should have some impact, there is no question but
- 11 that this facility is needed. My point was to the need
- 12 assessment done in the Environmental Impact Report.
- 13 The company will not proceed on a billion dollar
- 14 project if it does not believe that there is a market for
- 15 the natural gas. And that's why I mentioned the letters
- 16 of intent that have been executed to date that show --
- 17 letters of interest that show a tremendous interest in the
- 18 gas.
- 19 CHAIRPERSON GARAMENDI: Do you have one of those
- 20 letters with you?
- 21 MR. MOYER: I don't. I'm running kind of light.
- 22 We have provided a number of them --
- 23 CHAIRPERSON GARAMENDI: Do we have those in our
- 24 record -- any of those letters of interest?
- MR. MOYER: And I believe you'll be hearing

1 testimony about that issue later as well in public

- 2 testimony from some of the customers -- potential
- 3 customers.
- 4 CHAIRPERSON GARAMENDI: Give me some preview
- 5 since you're here.
- 6 MR. MOYER: I haven't been involved in crafting
- 7 their testimony, Mr. Chairman, so I wouldn't have any --
- 8 CHAIRPERSON GARAMENDI: Have you seen the
- 9 letters?
- 10 MR. MOYER: Have I seen the letters? Yes.
- 11 CHAIRPERSON GARAMENDI: Can you share with me
- 12 some idea of what they -- your assessment of what they
- 13 are.
- MR. MOYER: The letters of interest are
- 15 substantially more than the volume of the facility.
- 16 CHAIRPERSON GARAMENDI: And are they -- they said
- 17 we'll buy the gas at the right price at the right time?
- 18 MR. MOYER: Yes.
- 19 CHAIRPERSON GARAMENDI: All right. Who wouldn't?
- 20 (Laughter.)
- MR. MOYER: Well --
- 22 CHAIRPERSON GARAMENDI: Okay. So we know that
- 23 there are customers for gas at the right time and the
- 24 right price.
- MR. MOYER: And I think you'll be hearing more

- 1 testimony about the need as the evening goes on.
- 2 CHAIRPERSON GARAMENDI: Has BHP Billiton done a
- 3 cost estimate of the delivery of gas to the shores of
- 4 California, that is into the California pipeline system?
- 5 MR. MOYER: I do not know. I can find that
- 6 information out.
- 7 CHAIRPERSON GARAMENDI: Well, certainly BHP --
- 8 MR. MOYER: I can come back and respond to that
- 9 in my remaining testimony. I'll find out the answer of
- 10 that.
- 11 CHAIRPERSON GARAMENDI: I think it would be most
- 12 useful in determining the usefulness of those letters of
- 13 interest to know what the delivery cost is.
- 14 MR. MOYER: Well, my guess is that it would not
- 15 be possible to establish a delivery cost without having
- 16 more thoroughly engineered the exploration and production
- 17 side, because you're really saying --
- 18 CHAIRPERSON GARAMENDI: You mean to tell me BHP
- 19 Billiton has been at this four years and has no idea what
- 20 the delivery cost is to the coast of California?
- 21 MR. MOYER: I'm saying --
- 22 CHAIRPERSON GARAMENDI: This is a major
- 23 international company and surely that would have been the
- 24 first thing they'd done.
- MR. MOYER: One can certainly guess that the cost

1 of production within a range and I think you can perhaps

- 2 estimate the production cost and add to that some
- 3 transportation cost and you might be able to get into a
- 4 range. Without doing more engineering, it won't be
- 5 possible to know that. It is clearly a project that --
- 6 CHAIRPERSON GARAMENDI: I find it difficult to
- 7 accept that.
- 8 That's fine, you're not under oath.
- 9 Let's move on.
- 10 Thank you very much.
- 11 MR. MOYER: Thank you.
- 12 Paul.
- 13 EXECUTIVE OFFICER THAYER: At this point we're
- 14 ready to move on to public testimony. Staff notes that
- 15 when we checked about a half an hour ago we have about 122
- 16 requests to speak. I think those are handed to you there.
- 17 We've tried to divide them up. I think we've got the
- 18 public officials who have been waiting to speak,
- 19 Congresswoman Capps is in the front row there. And so
- 20 we're recommending you take those first, since they have
- 21 other public service.
- 22 CHAIRPERSON GARAMENDI: It appears as though we
- 23 have two elected officials here and we have several staff
- 24 people. Without harming the staff people's egos, we will
- 25 simply take the elected officials and then the rest later.

- 1 Congresswoman Lois Capps.
- 2 CONGRESSWOMAN CAPPS: Good morning and welcome to
- 3 Oxnard and to the 23rd District, which I have the honor of
- 4 representing in the United States House of
- 5 Representatives. Thank you Chairman Garamendi,
- 6 Commissioners Chiang and Sheehan for being here today.
- 7 I have a signed statement to submit for the
- 8 record. And I have enjoyed working with the State Lands
- 9 Commission on efforts to protect our State's coastline
- 10 from new off-shore oil and gas drilling in federal waters.
- 11 Today, I'm please to share with you the serious concerns
- 12 of our coastal communities about the Cabrillo Port
- 13 Liquefied Natural Gas or LNG project.
- 14 I am convinced that Cabrillo Port represents an
- 15 unacceptable risk to our central coast communities. It
- 16 will cause at least 20 Class 1 significant and unmitigated
- 17 impacts to air and water quality, public safety, marine
- 18 wildlife and many more. These impacts will degrade our
- 19 environment, negatively impact our region's economy and
- 20 harm our state's coastal resources.
- 21 I urge you to deny certification of the
- 22 Environmental Impact Report and to deny the lease for the
- 23 proposed LNG project. And here are some of the reasons.
- 24 First, the report does not adequately explore
- 25 either the need for or the alternatives to this project,

- 1 to which you referred previously, Mr. Chairman. This
- 2 failing alone should result in the project being denied.
- For instance, the report excludes consideration
- 4 of domestic natural gas supplies and other existing LNG
- 5 proposals. And it does not include an analysis of energy
- 6 alternatives that are currently available. There are
- 7 faster, cheaper and longer term energy solutions such as
- 8 conservation, efficiency, and renewable energy that are
- 9 available now. These alternatives will not endanger
- 10 public safety or our economically valuable coastal
- 11 environment.
- 12 Now second, as you are well aware, the air
- 13 quality in southern California suffers from high levels of
- 14 pollution. Cabrillo Port would violate the federal Clean
- 15 Air Act and degrade our air quality even with mitigation
- 16 measures. Cabrillo Port will be the largest smog producer
- 17 in Ventura county and interfere with its efforts to
- 18 achieve clean air standards.
- 19 As a public health nurse, I am keenly aware that
- 20 air pollution resulting from Cabrillo Port will impair the
- 21 health of all Californians. Further more, EPA, the
- 22 Environmental Protection Agency, has recently proposed
- 23 exempting Cabrillo Port from strict clean air standards,
- 24 which require the applicant to find offsets for its
- 25 increased pollution. A colleague of mine in Congress has

- 1 begun oversight of the EPA for this decision.
- 2 It's unfair that this project would not be held
- 3 to the same rigorous standards that would apply to any
- 4 other facility emitting similar levels of air pollution in
- 5 our area.
- 6 It's also unwise, I believe, to approve a project
- 7 which is under investigation for highly irregular
- 8 activities on the part of the applicant.
- 9 The report also fails to adequately address
- 10 global warming impacts. According to some estimates, this
- 11 project would be responsible for up to 25 million tons of
- 12 global warming pollution per year. Now, California's
- 13 played a leading role in efforts to curb global warming
- 14 pollution. It appears that Cabrillo Port jeopardizes
- 15 those efforts.
- In addition, this project would also seriously
- 17 impact our water quality and the marine environment on the
- 18 central coast. The proposed facility would be sited
- 19 adjacent to a national park, a national marine sanctuary.
- 20 Discharges, including vessel oil spills, would damage
- 21 these fragile marine ecosystems. And according to the
- 22 National Marine Fisheries Service, noise and collisions
- 23 resulting from Cabrillo Port represent a significant
- 24 threat to marine animals.
- 25 Finally, Cabrillo Port would be located near

- 1 major shipping lanes and could impact commercial,
- 2 recreational and Naval navigation. An accident at the
- 3 facility or on a tanker, for example, could engulf
- 4 shipping lanes and threaten humans, marine wildlife or
- 5 vessels caught in the range of an explosion.
- 6 A recent GAO report indicates that the risk
- 7 assessment models used for Cabrillo Port, this project, do
- 8 not go far enough to protect public safety. Moreover,
- 9 according to the FEIR the specifications of the floating
- 10 storage and regasification unit, the first of its kind in
- 11 the world, will be submitted after approval of the project
- 12 and issuance of the license.
- 13 Deferring the review of these critical pieces of
- 14 information prevent stakeholders from thoroughly assessing
- 15 the implications of this project. I find this offensive
- 16 to the hundreds of thousands of people directly impacted.
- 17 These are my constituents.
- 18 This project flies in the face of the commitment
- 19 that the California -- legislation and the Governor has
- 20 recently turned into a project as a goal of ours.
- 21 A month ago -- and this is my final point --
- 22 after the EIR was released, I went back to the U.S.
- 23 Geological Survey and asked them to update their review
- 24 regarding the treatment of potential seismic hazards in
- 25 the recently released final impact report. The letter was

- 1 just received back from the USGS this morning.
- 2 The many geologic hazards a pipeline would face
- 3 were it to follow the route proposed in the draft EIR has
- 4 now been updated.
- 5 COMMISSIONER CHIANG: I'm sorry, could you repeat
- 6 that last line. I missed it.
- 7 CONGRESSWOMAN CAPPS: After the EIR was released
- 8 a month ago, I asked the USGS to update its evaluation.
- 9 We just received this letter this morning, which I would
- 10 like to also submit for your record being analyzed. But
- 11 it indicates that they have serious concerns about the
- 12 many geologic hazards a pipeline would face and do remain
- 13 even despite the EIR.
- 14 In sum, you should deny certification of this
- 15 report and the lease, because of the proposed Cabrillo
- 16 Port LNG project's impact on our environment. It poses
- 17 serious threats to the public safety, air and water
- 18 quality and the precious coastline of our community.
- 19 As I mentioned just now, the State of California
- 20 recently has affirmed its commitment to emphasizing
- 21 renewable energy sources. And this project flies in the
- 22 face of that commitment. Before we embark on this
- 23 potentially harmful and irreversible project of such a
- 24 dubious nature, I believe we should first concentrate on
- 25 reducing out energy needs and increasing our use of safer

- 1 alternative energy sources.
- 2 And, again, I thank you very much for conducting
- 3 this hearing in this community and for allowing me to make
- 4 my statement.
- 5 Thank you.
- 6 (Applause.)
- 7 CHAIRPERSON GARAMENDI: Thank you very much.
- 8 Now, now, now. Do I need to repeat my earlier
- 9 point about demonstrations of all kinds?
- 10 I don't think so. You're all very, very well
- 11 behaved. So thank you very much for not doing that again.
- 12 Congresswoman, thank you for your testimony.
- 13 There are six members of the local governments in
- 14 the area. We'll take these in an order that has to do, I
- 15 think, with reverse alphabet of the location.
- I would ask you to hold to the time limit, which
- 17 I believe is three minutes.
- 18 EXECUTIVE OFFICER THAYER: (Nods head.)
- 19 CHAIRPERSON GARAMENDI: So Damon Wing, Ventura
- 20 County Supervisor. Representing? No, no, Damon, you get
- 21 to sit down.
- MR. WING: You're the boss.
- 23 (Laughter.)
- 24 CHAIRPERSON GARAMENDI: I am. That's correct.
- 25 (Laughter.)

1 CHAIRPERSON GARAMENDI: As Barbara Boxer says,

- 2 "I've got the gavel".
- 3 (Laughter.)
- 4 CHAIRPERSON GARAMENDI: Supervisor John Flynn, I
- 5 believe you're here.
- 6 Please.
- We're going to take staff after our lunch break.
- 8 VENTURA COUNTY SUPERVISOR FLYNN: Good morning,
- 9 Mr. Chairman and good morning, Mr. Chiang and Ms. Sheehan.
- 10 We welcome you here to Oxnard.
- 11 Mr. Garamendi, I helped you several years ago
- 12 when you came to Oxnard. I helped you with a meeting.
- 13 And ever since then I've been getting Christmas cards.
- 14 (Laughter.)
- 15 CHAIRPERSON GARAMENDI: That's good.
- 16 VENTURA COUNTY SUPERVISOR FLYNN: I put my
- 17 Christmas card from you on the piano. And several years
- 18 ago, my son, who's now a City Councilman here in Oxnard,
- 19 said Dad, "Is he a real important person?" I said, "Yes
- 20 he is." "Is he more important than you are?" "Yes, he
- 21 is."
- (Laughter.)
- 23 VENTURA COUNTY SUPERVISOR FLYNN: Thank you for
- 24 being here.
- 25 CHAIRPERSON GARAMENDI: It all depends upon the

- 1 forum.
- VENTURA COUNTY SUPERVISOR FLYNN: I associate my
- 3 comments with those of Congresswoman Lois Capps. But mine
- 4 is going to be more of a general kind of a decision making
- 5 presentation more on what my constituents are telling me.
- 6 They sent me here today. I represented the constituents
- 7 here in Oxnard for 30 years. I'm on my 31st year. This
- 8 is a community that is 80 percent none Anglo, so I'm very
- 9 happy and proud to be able to represent them for such a
- 10 long time.
- 11 This is a watershed time and issue that we face
- 12 here. I hope that we can think globally here and act
- 13 locally. I've looked at that phrase for a long time and
- 14 this really fits it very well. We need to send a signal
- 15 to the world. California is looked at as a great leader
- 16 throughout the world. We impact all kinds of cultures and
- 17 all kinds of people and we do that because we have such
- 18 great respect from those throughout the world. So
- 19 california is a leader. They're going to look at the
- 20 signal that you send them in your decision that you make.
- 21 I have several comments to make. One is
- 22 conservation and alternative renewable energy sources are
- 23 the future. That's our future and the future begins now.
- 24 Conservation works. Several years ago I worked
- 25 with then Supervisor Sunne Wrigt McPeak. I was from the

- 1 south. She's from the north. We developed with a
- 2 committee a conservation water program. Conservation
- 3 works. We got the big water purveyors to agree, and one
- 4 million acre feet of water was produced from that program.
- 5 So conservation works.
- 6 Momentum is building among the population and
- 7 institutions. Global warming is heard every day. It's a
- 8 term people understand today. The pictures of ice melt
- 9 and polar bears drowning is like the canary and the mime
- 10 only more important. People are not at a panic stage as
- 11 yet, but they are very very concerned.
- 12 I have people coming up to me in the marketplace
- 13 and say, "What are we going to do and what are you doing,
- 14 John Flynn?" What are we going to do about this issue of
- 15 global warming?
- People are not in a panic yet, but they are very
- 17 very concerned. One can debate that we are in a crisis.
- 18 We're very close. This issue complicated -- this issue is
- 19 complicated and the people want leadership.
- 20 The Supreme Court decision on EPA is a great
- 21 strong signal for us. They ordered EPA to do more
- 22 emissions reduction. And in an article in the New York
- 23 Times, it must have been presented to the Supreme Court,
- 24 the United States produces 25 percent of the world's
- 25 emissions. The U.S. has 5 percent of the world's

- 1 population. Time magazines had 51 ways we at the local
- 2 level, all of us, all of you, can do to try to attain this
- 3 problem.
- 4 The Star, the Ventura County Star, they don't
- 5 always get along with me, but they endorsed the idea that
- 6 you should vote no on this issue. The LA Times also.
- 7 Oxnard is a very religious city. You go to every
- 8 church in this city and they're packed. So they have
- 9 great respect for God's creation and we are the steward --
- 10 we provide the stewardship for the earth. It's not ours
- 11 to destroy.
- 12 You are in the most significant position of
- 13 anyone in California today. That's how important this
- 14 decision is. I can't think of a more demanding question
- 15 before you and the issue is so so important.
- I have voted a few times in my career as a
- 17 Supervisor and I know I voted wrong on an issue. When I
- 18 wake up in the night and think about you really didn't do
- 19 what you should have done. My conscience won't allow me
- 20 to stop thinking about an issue where I voted the wrong
- 21 way. It hasn't happened a lot, but it has happened.
- The people in my district are putting their
- 23 future and their sons, their daughters, their
- 24 grandchildren in your hands. They sent me to ask you to
- 25 lead us. You are the leaders. We are the followers and

- 1 we will help in any way.
- 2 I'll close my comments by saying you're very
- 3 important guests to us. If we can serve you in any way,
- 4 my office can serve you in any way, please call on us and
- 5 we will accommodate you.
- 6 Thank you very much, Mr. Chairman.
- 7 CHAIRPERSON GARAMENDI: Thank you very much, Mr.
- 8 Flynn.
- 9 Murray Rosenthal. Excuse me, Rosenbluth.
- 10 I'm going to call about five people and if you
- 11 can come up and stand one next to the other, then we'll go
- 12 through these as quickly as we can. Please pay attention
- 13 to that little red light there. Generally red lights mean
- 14 stop.
- 15 (Laughter.)
- 16 PORT HUENEME CITY COUNCILMEMBER ROSENBLUTH:
- 17 Honorable Chair --
- 18 CHAIRPERSON GARAMENDI: Excuse me, just one
- 19 moment, if you would.
- John Zaragoza from the City Council of Oxnard;
- 21 Andy Stern City Council of Malibu; Pamela Conley Ulich
- 22 Malibu City Council, if you'll come up and make yourselves
- 23 stand there and we'll go one after another.
- 24 Please continue.
- 25 PORT HUENEME CITY COUNCILMEMBER ROSENBLUTH:

1 Honorable Chair, Commissioners, ladies and

- 2 gentlemen, good afternoon. My name is Murray Rosenbluth.
- 3 For the past 11 years I've been a member of the Port
- 4 Hueneme City Council. Port Hueneme is a city of some
- 5 22,000 souls, just up the coast from the Oxnard.
- I am also a Registered Professional Engineer in
- 7 the State of California. Prior to elected office I had a
- 8 30 year career with a multi-national company. And I have
- 9 direct experience with gas fired turbine cogeneration
- 10 technology.
- 11 The Port Hueneme City Council voted on April 4th
- 12 to oppose BHP Billiton Cabrillo Port. The reason is to
- 13 protect the health and safety of the Port Hueneme
- 14 residents, protect the environment and preserve
- 15 surrounding coastal natural resources. These concerns are
- 16 very valid, but some LNG proponents charge that opposition
- 17 is based on NIMBY, Not In My Backyard.
- 18 As a Port Hueneme City Council Member, my issue
- 19 is not based on NIMBY. The issue is much better than
- 20 that. The major pro-LNG argument is diversity, because we
- 21 will need LNG in the future because natural gas usage will
- 22 increase without a corresponding increase in natural gas
- 23 supply on our continent.
- 24 This often claimed future North American natural
- 25 gas supply demand imbalance, as a justification for

1 importing LNG, is in my opinion, a fiction, a myth. It's

- 2 not just opinion. Reputable engineering and financial
- 3 analyses showed that there is and will be ample North
- 4 American sourced natural gas for the foreseeable future.
- 5 As an engineer I have reviewed these analyses and I am
- 6 convinced that they are correct.
- The claim of natural gas shortage is used to
- 8 justify more expensive LNG, an expense that we will all
- 9 feel in our energy billings for heating, cooking, and
- 10 electrical energy. We will feel it in the same way that
- 11 we feel the cost of gasoline well over \$3 per gallon.
- 12 Think of that the next time you put gas in your tank.
- 13 Even if the alleged future of domestic gas
- 14 shortage were true, there are ample viable alternatives.
- 15 For example, conservation, renewable energy and More
- 16 efficient technology. Two examples, converting existing
- 17 gas-fired electrical generating plants by retrofitting
- 18 them with combined-cycle technology. And secondly,
- 19 offering financial incentives for cogeneration technology.
- 20 I voted no for our imported gas, because it will
- 21 not be needed and because our natural gas eating, cooking
- 22 and electricity bills will be stabilized without LNG, not
- 23 escalating if Cabrillo Port LNG is authorized.
- I ask you to please join me with a no vote.
- Thank you.

1 CHAIRPERSON GARAMENDI: Thank you. Murray, we

- 2 appreciate that.
- 3 Mr. Zaragoza.
- 4 OXNARD CITY COUNCILMEMBER ZARAGOZA: Thank you,
- 5 Chairman Garamendi and the Commissioners. I'm John
- 6 Zaragoza Council Member here for the City of Oxnard. I've
- 7 been a council member for about 11 years, Mayor Pro Tem
- 8 for about four years for the great City of Oxnard. And
- 9 I'm here this afternoon, Mr. Chairman, on behalf of the
- 10 Oxnard City Council and on behalf of the community of
- 11 Oxnard.
- 12 And I have a letter that I'd like to read on
- 13 behalf of the City Council and a couple of comments,
- 14 personal comments on my own.
- 15 "Now that the BHP Billiton LNG gas
- 16 project is nearing the final stages of
- 17 the federal and State permitting
- 18 process, the City Council of the City of
- 19 Oxnard is concerned that the project may
- 20 be approved and permitted over the
- 21 objections of the Oxnard City Council
- 22 and the community.
- "Even though the residents of Oxnard
- 24 will be mostly impacted by the
- 25 construction and operation of the LNG

1	facility off the coast of the City of
2	Oxnard, the City Council has no
3	representation or the City for the
4	federal State decision-making process.
5	"The only discretionary permit that
6	the City has is the opportunity to
7	consider a permit to determine whether
8	the proposed facility and land-based
9	pipe that enters the shore of Oxnard are
10	in the California Coastal Commission.
11	"The City Council has a long history
12	of expressing concerns over the proposed
13	LNG facilities. We've held numerous
14	public hearings and received public
15	input to review the findings of the
16	Draft Environmental Impact Report and
17	also the Environmental Impact Study
18	EIR/EIS issued on the project.
19	"On July 13, 2004, the City Council
20	passed a resolution Stating that the
21	City Council of the City of Oxnard
22	opposes BHP Billiton and Crystal Energy
23	projects unless and until the proponents
24	can demonstrate to the satisfaction of

25 the City Council that the adverse

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1 effects upon the environment, safety and
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- 2 health and the economy of the City of
- 3 Oxnard has been mitigated.
- 4 "After thorough review of the
- 5 EIR/EIS, we have concluded that the
- 6 proponents have not fully mitigated all
- 7 of its significant negative impacts in
- 8 the Final EIR/EIS. It is for this
- 9 reason, Mr. Chairman, that the City
- 10 Council of the City of Oxnard is
- 11 restating our opposition to the
- 12 construction and the operation of an LNG
- facility off the coast of the City of
- 0xnard."
- 15 And Chairman Garamendi, I'd like to share a
- 16 couple of my just personal opinions for one minute.
- 17 The City of Oxnard, Chairman -- and by the way
- 18 I'd just like to share with you that I was happy to meet
- 19 you when you were campaigning here in Oxnard at the
- 20 Marriott. And I voted for you.
- 21 (Laughter.)
- 22 CHAIRPERSON GARAMENDI: I was going to point out
- 23 earlier that both Mr. Chiang and I do represent the City
- 24 of Oxnard.
- OXNARD CITY COUNCILMEMBER ZARAGOZA: Thank you so

- 1 much.
- 2 And the City of Oxnard has been a host to three
- 3 landfills for Ventura county. We have two huge electrical
- 4 powerplants off of Mandalay and off of Ormond. We're
- 5 currently now being proposed a peaker plant here in the
- 6 City of Oxnard off Oxnard shores. We're faced with a huge
- 7 radioactive slag piled here at Halaco just a couple of
- 8 miles from here. And we had hearings like this before and
- 9 the said we're going to be safe and now it's radioactive.
- 10 And it's affected our population.
- 11 Please, as a resident of Oxnard for three
- 12 generations -- we've been here for three generations, I
- 13 would ask you please to the Cal State Commission do not
- 14 approve this LNG. It will affect over 400,000 people
- 15 starting from Ventura, Oxnard, Hueneme, El Rio, two bases
- 16 and the great city of Malibu. Please do not approve this
- 17 LNG.
- 18 Thank you so much.
- 19 CHAIRPERSON GARAMENDI: Thank you very much, Mr.
- 20 Zaragoza.
- 21 OXNARD CITY COUNCILMEMBER ZARAGOZA: And I have a
- 22 letter here from the City Council that I do share with
- 23 you.
- 24 CHAIRPERSON GARAMENDI: Put it on the table and
- 25 we'll add it to the file. Thank you very much.

- 1 Andy Stern and Pamela Conley Ulich.
- 2 MALIBU CITY COUNCILMEMBER STERN: Good afternoon,
- 3 Chair Garamendi and Commissioners and staff. It is a
- 4 privilege to be before you this afternoon. I very much
- 5 appreciate this opportunity. This is an historic day.
- 6 Never before have the cities of Port Hueneme, Oxnard and
- 7 Malibu join together on any cause. But I am proud to
- 8 stand with them today in solidarity in asking you to deny
- 9 certification of the EIR and do not issue a lease for the
- 10 BHP Billiton Cabrillo Port.
- 11 I've been to several of these hearings by
- 12 different organizations. I want to give you a little
- 13 preview of what some people are going to say. There are
- 14 certain people who are going to say we really need this so
- 15 our rates we'll go down. We can't afford higher rates.
- 16 I've seen no evidence to that. I asked these people, I've
- 17 seen no evidence at all of that.
- 18 I was going to speak to whether or not -- I'm
- 19 actually looking at that little clock right there. I was
- 20 going to speak to whether or not this BHP Billiton
- 21 Cabrillo Port is even needed, but I appreciate the Chair
- 22 and the Commissioners questions and staff's responses to
- 23 that, so I won't get into that.
- I'm not a technical guy. I'm one of the elected.
- 25 And you're going to hear lots of technical stuff today.

1 But I look at this, and the one thing that I really get

- 2 out of it is the best case scenarios are what I want to
- 3 talk about. It seems to me the best case scenario is a
- 4 significant increase in air pollution. That just doesn't
- 5 affect Oxnard, Port Hueneme and Malibu. Know there are
- 6 hundreds of thousands of people. Air pollution knows no
- 7 borders. And the City of Malibu is privileged to house
- 8 over 15 million beach visitors per year. There are 50
- 9 million visitors that visit LA county beaches per near, 15
- 10 in Malibu alone. That's LA county beaches and harbors
- 11 statistics. That's the good news. That's the best case
- 12 scenario.
- 13 The worst case scenario is this thing catches
- 14 fire. It goes into the shipping lanes. There's an oil
- 15 tanker going by and I cannot imagine the consequences of
- 16 that. And that again just doesn't affect our areas. So I
- 17 would ask that this evening you not certify the EIR. You
- 18 not issue the lease to be BHP Billiton, because I would
- 19 say the only way -- the only way to really protect the
- 20 health and safety of our residents is to not do so.
- 21 Thank you.
- 22 CHAIRPERSON GARAMENDI: Thank you very much.
- 23 MALIBU CITY COUNCILMEMBER ULICH: Good morning --
- 24 or good afternoon. I no you're hungry, so I'll try to
- 25 make this quick so you can get out of here and eat.

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1 My name is Pamela Conley Ulich. I'm on the
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- 2 Malibu City Council. More importantly I'm a mother of two
- 3 young children. I come to you -- I biked here today from
- 4 Malibu. So I could remember why the 15 million visitors
- 5 and all of us out here enjoy coming to the ocean every
- 6 day. I saw the surfers. I saw some dolphins. I was able
- 7 to breathe the beautiful air we have without the smog.
- 8 You three people here today are going to make
- 9 history. I guess I wanted you to ask yourself, when you
- 10 make your decision today, are you going to make the world
- 11 better or are you going to make the world worse? I mean,
- 12 that's really what it goes down to. It boils down to that
- 13 question. Is this facility going to make the world
- 14 better?
- 15 I am not going to belabor the points that were
- 16 made by Congresswoman Capps. I think she eloquently told
- 17 you all the reasons to oppose this. I'm really glad, I
- 18 have to say, that you're having this hearing today,
- 19 because when I did pick up Thursday's issue of the LA
- 20 Times, I read something by BHP. This is from Renee
- 21 Klimczak, the president of BHP. And I'm going to quote
- 22 you what was said in the open letter to the community of
- 23 LA.
- 24 "The California Air Resources Board and the
- 25 California State Lands have reviewed and signed off on

1 this project." They have signed off on this project. I'm

- 2 concerned about this misrepresentation by the president.
- 3 And I'm asking you, if they're able to put this in
- 4 misrepresentation in the LA Times for the world to see,
- 5 what else have they misrepresented here today?
- 6 I'm so glad that you come here with open minds,
- 7 open hearts, and I know -- and I trust you're going to
- 8 make the right decision in denying this.
- 9 This facility, if you do uphold it, is an -- it
- 10 would be unconscionable to sign off on this. This
- 11 facility is not a solution to our problems. According to
- 12 the EDC, energy conservation and efficiency could provide
- 13 California with twice the energy that this project would
- 14 give us. So let's conserve. Let's take it to the people.
- 15 Let's take it to my kids that I teach them you can bike
- 16 here. You don't have to drive everywhere.
- 17 You know what, put another blanket on at night.
- 18 You don't have to turn on the heat. Eat something for all
- 19 those people out there who are anorexic. You won't get as
- 20 cold.
- 21 (Laughter.)
- 22 MALIBU CITY COUNCILMEMBER ULICH: You know do the
- 23 right thing for us. We trust you. Please deny this. We
- 24 can do better. California needs to go forward. We need
- 25 to be here for the future.

1 There's one point that I'm going to agree with,

- 2 that the Manatt Phelps said in his presentation, which is
- 3 no, you keep going back. He was referring to his
- 4 PowerPoint. But I agree with that, don't go back here
- 5 today. Do not go backwards. Go to the future. Do not
- 6 allow this to happen. The world will thank you. I will
- 7 thank you. And thank you for your time and have a good
- 8 lunch.
- 9 CHAIRPERSON GARAMENDI: Thank you.
- 10 MALIBU CITY COUNCILMEMBER ULICH: Oh, can I quote
- 11 Robert F. Kennedy real quick. This is in the Outdoor
- 12 Magazine and the Governor's on the cover. And as you make
- 13 your decision tonight, he equivocated. "The Hudson River
- 14 pollution is a theft. It was the act of a big shot with
- 15 political clout stealing from the rest of us. Stealing
- 16 publicly owned resources from the public. We've got to
- 17 protect the air we breathe, the water we drink, the
- 18 wildlife, the public lands, the waterways that enrich us
- 19 that connect us to our past, that provide context to our
- 20 communities, and that are the source ultimately of our
- 21 values and virtues and character as a people."
- Thank you.
- 23 CHAIRPERSON GARAMENDI: I can't make up his mind
- 24 about that project.
- 25 MALIBU CITY COUNCILMEMBER ULICH: That's why I

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1 quoted this.
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- CHAIRPERSON GARAMENDI: There are two people that
- 3 I want to take immediately when we get back from our lunch
- 4 break. They are former members of the legislature and
- 5 dear friends Hannah-Beth Jackson and Fran Pavley. And
- 6 then we'll move through the staff of the various
- 7 legislators and members of the council and supervisors
- 8 here. Then we'll go to the general public. We're going
- 9 to take a 45-minute break. We're going to be back here
- 10 promptly at two o'clock. Don't leave yet. We may change
- 11 my mind.
- 12 (Laughter.)
- 13 CHAIRPERSON GARAMENDI: We'll be back at two
- 14 o'clock.
- 15 (Thereupon a lunch break was taken.)
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1	AFTERNOON	SESSION

- 2 CHAIRPERSON GARAMENDI: Good afternoon, everyone.
- 3 EXECUTIVE OFFICER THAYER: If we could have the
- 4 mikes back on, please.
- 5 CHAIRPERSON GARAMENDI: It's two o'clock or
- 6 shortly thereafter. I know, so much for leadership.
- We're ready to go into our afternoon session.
- 8 There were representatives of elected officials that I
- 9 said we'd get to immediately. The staff calculates that
- 10 we have -- they're very good at numbers, despite what I
- 11 was saying earlier this morning. We have about 120 people
- 12 signed up to speak. I assume most of them are still
- 13 around, but not in the room at the moment.
- 14 In three hours we'd like to be finished near five
- 15 o'clock with those folks. So we're going to limit
- 16 testimony this afternoon -- Paul, what would you suggest?
- 17 EXECUTIVE OFFICER THAYER: The only way it will
- 18 work will be a minute and a half a piece.
- 19 CHAIRPERSON GARAMENDI: Oh, let's see if we can
- 20 stay as close to a minute and a half as possible. There
- 21 are some people that I know have more detailed testimony
- 22 and we're aware of that and we'll deal with that as we go
- 23 along. Many of you are going to say you don't like the
- 24 project or you do like the project. I would recommend
- 25 that if you're not adding new information, that you make

- 1 your comments very quick about old information that's
- 2 already on the record, and you can drive that point home
- 3 more quickly and it will certainly keep the Commissioners
- 4 happier, either side of the question whatever you may be
- 5 on.
- 6 Okay. Let's see if we can go through this. I
- 7 understand that Fran Pavley had to leave and is not with
- 8 us this afternoon.
- 9 EXECUTIVE OFFICER THAYER: She's right there.
- 10 CHAIRPERSON GARAMENDI: Well, hello, Fran.
- 11 (Laughter.)
- 12 CHAIRPERSON GARAMENDI: How about Hannah-Beth, is
- 13 she around? Well one of the two of you that were gone.
- 14 So, Fran, you get to start us off, if you would please.
- 15 I'm going to call up two other people. I think
- 16 Hannah-Beth Jackson did leave. Hilda Garcia, if you'll
- 17 come up and Stuart Waldman from Mr. Levine's office.
- 18 Damon, I called you up earlier, then I told you to sit
- 19 down, so my apologies on that, but it's time to stand up
- 20 again.
- 21 Damon Wing from Supervisor Parks Office and Denis
- 22 O'Leary, Oxnard School District. And finally among those
- 23 representing the public here Deborah Meyer-Morris, Oxnard
- 24 PTA.
- Hello, Fran.

- 1 RETIRED ASSEMBLYMEMBER PAVLEY: Hello.
- 2 CHAIRPERSON GARAMENDI: I think we're talking
- 3 about some of your legislation earlier.
- 4 RETIRED ASSEMBLYMEMBER PAVLEY: I recognized
- 5 that. Thank you very much. And good afternoon, everyone.
- 6 And I'll keep my comments relatively brief with 120
- 7 speakers.
- 8 CHAIRPERSON GARAMENDI: You can have more than a
- 9 minute and a half.
- 10 RETIRED ASSEMBLYMEMBER PAVLEY: Well, I
- 11 appreciate that. Just by way of background. I
- 12 represented the Oxnard, Port Hueneme and Malibu areas in
- 13 the State Legislature for six years from 2000 to 2006. So
- 14 I'm very familiar with this particular project and watched
- 15 it go through the process.
- I'm going to ask you to today in my presentation
- 17 though your consider and deliberation, denial of the
- 18 certification of the EIR for the following three primary
- 19 reasons:
- 20 One there's never really been an adequate
- 21 analysis in the EIR determined if this facility is really
- 22 needed. And your questioning earlier this morning was
- 23 right on track given the LNG terminal in Baja. And also
- 24 the role of alternative measures, particularly renewable
- 25 fuels, as meeting our energy needs in the future.

- 1 I'm well aware that the CEC, our Energy
- 2 Commission, has documented that our per capita consumption
- 3 of California's State level for the past 20 years. And we
- 4 have measures in place to increase our efficiency plus
- 5 capture more renewable energy.
- 6 But I wanted to talk specifically today about
- 7 global warming. I was the author of 1493, that's the
- 8 clean car regulation bill to reduce tailpipe emissions by
- 9 30 percent by 2016 subject to the Supreme Court direction
- 10 that the EPA has the authority to grant a waiver under the
- 11 Clean Air Act. I'm also the author of AB 32, the Global
- 12 Warming Solutions Act of 2006.
- 13 And I want to be very clear, because some of the
- 14 questions alluded to the fact that since this project EIR
- 15 process predated the signing of the bill that somehow it
- 16 shouldn't be relevant to the discussion here today, but I
- 17 think it directly is.
- 18 First of all, the bill was signed into law
- 19 September of 2006. It will require a cap on greenhouse
- 20 gas emissions and a reduction back to 1990 levels. That's
- 21 in law. That's in statute. The Air Resources Board over
- 22 the next several years will do the following things:
- 23 Require mandatory reporting of all significant emitters to
- 24 establish a baseline; and then they'll also require sector
- 25 by sector reduction of emissions.

1 As you know, natural gas like oil and coal are

- 2 fossil fuels and are the main contributors to global
- 3 warming. We should be, as a state, reducing not
- 4 increasing our reliance on fossil fuels. This project is
- 5 going in the wrong direction and is consistent with the
- 6 goals of AB 32 as I wrote it.
- 7 The full life impact of the 90 plus ships
- 8 traveling halfway around the world to this terminal off
- 9 our coast each and every year, along with cumulative
- 10 impacts of all the support vessels for this off-shore
- 11 facilities and the energy used and emitted through the
- 12 extraction, liquefaction, transportation and
- 13 regasification processes should be measured and also
- 14 mitigated.
- 15 Global warming, like one of your previous
- 16 speakers stated, is the most important environmental and
- 17 potentially economic crisis of the 21st century. We can
- 18 and we must do better.
- 19 Last week the Supreme Court recognized greenhouse
- 20 gas emissions from mobile sources as pollutants under the
- 21 Clean Air Act and subject to regulation. The State Lands
- 22 Commission should be very concerned about global warming.
- 23 Sea level rise, extreme weather episodes, increased air
- 24 pollution, impacts on marine ecosystems, your wetlands and
- 25 our coastlines will have dramatic consequences,

- 1 specifically to your area of jurisdiction.
- 2 Finally, I have a great deal of concern regarding
- 3 the unmitigated local impacts of air pollutants,
- 4 particularly NOx, that will be caused by this proposed
- 5 project. Two tugboats operating for less than half the
- 6 time of the project up and down the coast do not
- 7 adequately address the potential direct health impacts to
- 8 Ventura county and LA county residents.
- 9 And I notice the blinking red light in front of
- 10 me. So with that, I will just end with I've talked to
- 11 many people in California, and what Californians want is a
- 12 clean, secure energy future. This project does not meet
- 13 that goal. I ask you to deny the certification of the
- 14 EIR.
- Thank you.
- 16 CHAIRPERSON GARAMENDI: Thank you. Just a
- 17 question, if I might. You spoke of AB 32. Did you say it
- 18 has a mandate to reduce greenhouse gas emissions back
- 20 RETIRED ASSEMBLYMEMBER PAVLEY: Correct, by the
- 21 year 2020 a reduction to 1990 levels. It's about a 25
- 22 percent reduction. It involves primarily stationary
- 23 sources, but also mobile sources as directly relevant to
- 24 AB 1493 on tailpipe emissions.
- 25 CHAIRPERSON GARAMENDI: I see.

1 RETIRED ASSEMBLYMEMBER PAVLEY: So if this sector

- 2 adds to that emission reduction, someone's going to have
- 3 to be required to reduce their emissions under that cap in
- 4 that sector.
- 5 CHAIRPERSON GARAMENDI: Interesting.
- 6 Thank you.
- 7 COMMISSIONER CHIANG: Fran, I have a question. I
- 8 asked that line of questioning that you just raised
- 9 earlier. Do you have a sense of the discharge that takes
- 10 place in the production of natural gas and its
- 11 transportation here to the U.S.?
- 12 (Thereupon members of the audience said they
- 13 could not hear.)
- 14 COMMISSIONER CHIANG: Do you have a sense of the
- 15 discharge of emissions from the production of natural gas
- 16 from Australia, Indonesia or Singapore both direct and
- 17 indirect to Cabrillo?
- 18 RETIRED ASSEMBLYMEMBER PAVLEY: I do not have
- 19 that in mega tons. But I know some of these speakers that
- 20 will be following me can answer those technical questions
- 21 on the total amount of tonnage that will be emitted to the
- 22 atmosphere. It's really important to know that you look
- 23 at the full life-cycle costs of not only the
- 24 transportation of the fuel, but at the other end in
- 25 Australia as well as this end and the whole process,

1 because, as you know, global warming is in deed a global

- 2 issue and can't be looked at as just defined in State
- 3 waters.
- 4 COMMISSIONER CHIANG: Thank you.
- 5 CHAIRPERSON GARAMENDI: Thank you very much. I
- 6 believe that is the last former member of the Legislature
- 7 to be here. Hence the termination of the courtesies and
- 8 back to a minute and a half. Staff members of various
- 9 staff I asked you to come up in whatever order.
- 10 Okay, Hilda Garcia.
- 11 Is Hilda here?
- 12 Damon.
- 13 MR. WING: Good afternoon, Chair Garamendi and
- 14 Commissioners. I'm Damon Wing representing Ventura County
- 15 Supervisor Linda Parks, who serves as Chair of the Board.
- 16 And thank you for the opportunity to comment.
- 17 Simply put, this proposed project does not comply
- 18 with Ventura County's air quality standards. Ventura
- 19 County Air Pollution Control District Rule 26.2(b)
- 20 requires that nitrogen oxides and reactive organic
- 21 compounds be offset. There are not sufficient emission
- 22 reduction credits available to offset the massive amounts
- 23 of emissions from this project.
- 24 Certification of the EIR and approval of this
- 25 project would be contrary to Ventura County's air quality

- 1 standards and would be contrary to the State of
- 2 California's efforts to reduce greenhouse gas emissions.
- 3 Ventura County is a leader in its efforts to
- 4 protect its environment and its citizens. We protect our
- 5 open space. We plant trees. We encourage responsible
- 6 building practices. We try, as best we can, to protect
- 7 our land and our air.
- 8 It is unacceptable to increase our health risks
- 9 and for the residents of Ventura County to bear that
- 10 burden. Please do not buy into the rhetoric that this is
- 11 a bridge to the future or that this will prevent an energy
- 12 crisis. In California, we already burn natural gas to
- 13 power our plants. LNG is not diversification. LNG is not
- 14 a bridge. It would be staying the course.
- 15 Our promise for our future is not to continue to
- 16 rely upon polluting fossil fuels. The promise for our
- 17 future comes from the more energy efficient -- for the
- 18 more efficient use of energy from clean renewable and
- 19 sustainable energy.
- 20 Please do not lead us down the path of
- 21 vulnerability to another market manipulated energy crisis.
- 22 We Californians deserve the serious consideration and
- 23 analysis of our energy future. Rather than hastily
- 24 approved projects, consider what we will realistically
- 25 demand, what is the best source of energy, how best to

1 distribute the energy, and how best to preserve

- 2 California's environmental integrity.
- 3 Thank you.
- 4 CHAIRPERSON GARAMENDI: Thank you very much.
- 5 COMMISSIONER CHIANG: I have a question.
- 6 Damon, you said they're not in compliance with
- 7 Ventura County's rules. There's not enough ERCs, Emission
- 8 Reduction Credits. How many more would they need to
- 9 purchase?
- 10 MR. WING: I think that's still being determined.
- 11 I know that the applicant is in the middle of trying to
- 12 secure a few more. But my understanding is there is still
- 13 several million left. But probably someone with more
- 14 technical knowledge could give you the specific amount
- 15 that's still required. And this is, under what we have,
- 16 under Ventura County APCD's Rule 26.2(b) to offset these
- 17 emissions.
- 18 COMMISSIONER CHIANG: And Ventura County
- 19 currently is in nonattainment according to Federal law.
- 20 So is it true that you're seeking an extension for
- 21 compliance?
- 22 MR. WING: I can't answer with certainty what the
- 23 APCD's actions are currently. But this is one of the
- 24 reasons why this is of great concern, because of the
- 25 nonattainment.

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1 COMMISSIONER CHIANG: Thank you.
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- 2 CHAIRPERSON GARAMENDI: Thank you. Stuart
- 3 Waldman.
- 4 MR. WALDMAN: Hi. Members of the Commission, my
- 5 name is Stuart Waldman. I'm Chief of Staff to State
- 6 Assemblymember Lloyd Levine, who's chair of the Utilities
- 7 and Commerce Commission.
- 8 Assemblymember Levine feels the BHP terminal is
- 9 the wrong project at the wrong time. California's headed
- 10 in a vastly different direction than it was four years
- 11 ago, and that direction is toward green, clean and
- 12 renewable energy sources.
- 13 Because of information contained in the
- 14 Environmental Impact Report, identifying more than a dozen
- 15 harmful effects on marine life, air quality and the
- 16 coastal environment, we know that this project is not in
- 17 compliance with our Clean Air Act. This proposal is a
- 18 giant step backward for California. Assemblymember Levine
- 19 urges your opposition.
- 20 CHAIRPERSON GARAMENDI: Shocking, 30 seconds.
- 21 (Laughter.)
- 22 CHAIRPERSON GARAMENDI: Moving on.
- Thank you.
- Denis O'Leary.
- OXNARD SCHOOL DISTRICT BOARD MEMBER O'LEARY: I'd

- 1 like his 30 seconds, please.
- 2 ACTING COMMISSIONER SHEEHAN: No, you can't.
- 3 CHAIRPERSON GARAMENDI: You don't get his time.
- 4 OXNARD SCHOOL DISTRICT BOARD MEMBER O'LEARY:
- 5 Thank you for coming to Oxnard, Commission. My
- 6 name is Denis O'Leary and I'm an elected board member of
- 7 the Oxnard School District.
- 8 Earlier, we heard from Supervisor Flynn that 80
- 9 percent of our community is minority. I want to go a step
- 10 further. In my school district that I represent, we have
- 11 over 15,500 students. It's a K-8 school district.
- 12 Ninety-three percent of those students are minorities.
- 13 Seventy-five percent of them receive free or reduced
- 14 lunches.
- 15 And I say this because this is exactly the
- 16 characteristic of the communities that receive projects
- 17 such as this LNG plant. Unfortunately, poverty has
- 18 everything to do with location of these unsafe and
- 19 unhealthy sites.
- 20 This is a population that can least provide
- 21 health care or relocate out of hazardous zones after such
- 22 a base has been placed in their community.
- 23 Also off our coast in Oxnard, it has been
- 24 mentioned, that we've had the Halaco Engineering Company
- 25 since 1965. This place, it has been denied and has been

1 fought in court for years that this was detrimental to our

- 2 community.
- 3 In 2004, Halaco was find \$150,000. Today,
- 4 unfortunately, we have to clean up the mess of Halaco that
- 5 has been created there over the last 40 years. And it is
- 6 now being proposed as a Superfund National Priorities list
- 7 project. The American taxpayers are going to wind up
- 8 paying more money to clean up Halaco than the private
- 9 company made in profits over the last 40 years.
- 10 The people of Oxnard have lived with that problem
- 11 over the last 40 years and now we're going to have to
- 12 suffer the financial burden as well while the private
- 13 company has now relocated to another state. I hope that
- 14 we do not have to replace Halaco with another promise
- 15 energy project that is proposed to help us.
- I do ask that the Lands Commission not certify
- 17 the EIR. The children here, their parents and their
- 18 grandparents have already suffered through environmental
- 19 hazards of the past. I would like to go a few generations
- 20 with some clean air.
- 21 Thank you.
- 22 CHAIRPERSON GARAMENDI: Thank you very much.
- Deborah Meyer-Morris.
- 24 I called Hilda Garcia earlier.
- 25 There is a group of people that were the

1 principal opponents to this project. I'd like to call

- 2 upon them. I understand they want to come up in some
- 3 order and that they've worked all of this out ahead of
- 4 time.
- 5 Susan Jordan, would you like to lead off and
- 6 let's see if we can get this -- again, I'd like to keep it
- 7 to a minute and a half apiece, judging from the size of
- 8 this
- 9 MS. JORDAN: I'm going to do my best. I'll try
- 10 be very quick.
- 11 Susan Jordan, Director of the California Coastal
- 12 Protection Network. The first thing I want to do is thank
- 13 you for coming to Oxnard and for holding an evening
- 14 hearing. I think it's extremely important. We do have an
- 15 organized presentation.
- Our unanimous belief is that this is a fatally
- 17 flawed project, that the final Environmental Impact Report
- 18 is highly deficient and the State Land's staff report
- 19 provides, what we feel, is incomplete and insufficient
- 20 information for the State to make a fully informed legal
- 21 and scientific decision.
- 22 That said, I want to thank the staff for doing,
- 23 what I think, was their sincere best under a difficult
- 24 situation.
- Let me start by focusing on the applicant's

1 proposed design. Many of the most egregious problems and

- 2 impacts derived from this project stem solely from the
- 3 design they chose. Instead of looking to a design that
- 4 minimizes its industrial footprint and has an operational
- 5 track record like the one that operates in the Gulf of
- 6 Mexico, they chose a massive floating factory, storage and
- 7 regas LNG terminal that would be moored off the coast. It
- 8 was a deliberate choice and I believe it was a mistake.
- 9 I see my time is running out, so what I want to
- 10 focus on is that this company knew back in 2004 that this
- 11 project would not comply with the rules of the Clean Air
- 12 Act. EPA did their very best to hold them to the letter
- 13 of the act. This company lobbied all the way to the White
- 14 House. This isn't a maybe. We have the documents. And
- 15 it has led to them being the subject of two high level
- 16 congressional investigations. We think that's a very
- 17 serious issue.
- 18 They argue that the law doesn't apply to them.
- 19 They sent a letter as of November 28th, 2006 insisting
- 20 that Ventura county's on-shore air rules do not apply to
- 21 them. I think last minute promises, unanalyzed
- 22 information at the last minute is unacceptable. We urge
- 23 you to not certify this Final Environmental Impact Report,
- 24 because it's deficient and it will compromise your future
- 25 evaluation of any LNG terminals that come before you in

- 1 the next years.
- 2 Thank you.
- 3 CHAIRPERSON GARAMENDI: Thank you very much.
- 4 Right on schedule.
- 5 Thank you. I think you said you had it
- 6 organized.
- 7 MS. JORDAN: Yes, I had it numbered, but do you
- 8 want me to call people up?
- 9 CHAIRPERSON GARAMENDI: Why don't we do this, I'm
- 10 going to call up -- they are numbered, okay.
- 11 Tam Hunt, why don't you come up. I'm going to
- 12 call five of you and you can kind of stand to one side.
- 13 Bill Powers, Rory Cox and Loretta Lynch.
- 14 MR. HUNT: Thank you, Chairman and Commissioners
- 15 and staff. My name is Tam Hunt. I'm the energy program
- 16 director at the Community Environmental Council in Santa
- 17 Barbara.
- 18 I've looked at the need issue for quite some time
- 19 now in California and wrote a report last year, April of
- 20 least year, looking at this issue in some detail. And we
- 21 found that the existing goals and mandates for renewables
- 22 and energy efficiency in California would far more than
- 23 substitute for the projected additional natural gas demand
- 24 supplies in California at that time.
- 25 Without belaboring the details, we found that if

1 these existing goals and mandates were met, we would have

- 2 130 to about 400 percent of the projected additional
- 3 natural gas demand met from renewables and energy
- 4 efficiency. The discrepancy here is because the Energy
- 5 Commission does not include all the relevant goals and
- 6 mandates. We did a comprehensive review, tallied all the
- 7 numbers and found different results.
- 8 Since it was issued last April, AB 32 was passed
- 9 into law reaffirming the State's strong commitment to
- 10 renewables and energy efficiency. It's almost a certainty
- 11 that additional goals and mandates will be imposed in
- 12 California between now and 2020.
- 13 A 33 percent RPS by 2020 is currently pending in
- 14 the Legislature, AB 94. There was a similar bill last
- 15 year that did not make it through with that goal. Again,
- 16 I think it's almost a certainty that bill will become law
- 17 fairly soon in California.
- 18 AB 32 also requires an analysis of life-cycle
- 19 emissions, cradle to grave emissions for natural gas and
- 20 everything else. There is some debate right now with the
- 21 relevant agencies as to what that means exactly. But the
- 22 ARB, the lead agency, has affirmed, they will be following
- 23 a life-cycle emissions analysis for implementation of AB
- 24 32. And this means that when you look at LNG, a report
- 25 was done last year, not yet published, by Carnegie Mellon

1 University that found that LNG imports, when you consider

- 2 the life-cycle emissions for greenhouse gases, who are on
- 3 a par with coal potentially. So the perception that
- 4 natural gas is much cleaner than coal is, in fact, true.
- 5 Natural gas and LNG are not the same thing. LNG, because
- 6 it has much higher energy requirements, has much higher
- 7 emissions.
- 8 Last, a word on the utilities report that
- 9 Chairman Garamendi brought up. Since our report was
- 10 issued last year, the utilities completed their report
- 11 finding not an increase in natural gas demand in
- 12 California through 2015 but 2016, instead a decrease. A
- 13 stark difference. And the report details why they're
- 14 coming down with different numbers.
- 15 Last, a word on economics. LNG is often touted
- 16 as a lower cost option. When you look at official data
- 17 over the last two years, every month has been tracked, LNG
- 18 in the U.S. is more expensive than natural gas.
- 19 Thank you.
- 20 CHAIRPERSON GARAMENDI: Thank you very much.
- 21 MR. POWERS: Thank you, Commissioners. Bill
- 22 Powers, professional engineer, Ratepayers for Affordable
- 23 Clean Energy.
- 24 BHP and the State Lands Commission, based on CEC
- 25 data, say high prices reflect declining domestic supplies.

1 Therefore, LNG is necessary to mitigate price volatility.

- 2 There's clearly sufficient domestic natural gas
- 3 supplies without LNG for the 10 to 20 year planning
- 4 horizon used by energy planners. An unregulated natural
- 5 gas commodity market is the issue. Throwing LNG at a
- 6 broken market will not control the price volatility.
- 7 A hyped market briefly collapsed in September of
- 8 2006 when the physical reality of a super abundance of
- 9 domestic gas trumped the hype. Spot prices dropped below
- 10 \$4 a million BTU, which was a normal price just a few
- 11 years ago. Major hedge fund trader Amaranth Advisors went
- 12 bankrupt betting the wrong way. They lost billions of
- 13 dollars.
- 14 One statement that's made repeatedly is that the
- 15 growth in electric generation is causing it -- will cause
- 16 a demand in natural gas demand. All of these gas plants,
- 17 modern, efficient are replacing old inefficient plants.
- 18 We have seen no growth in gas demand because of
- 19 modernizing our fleet of natural gas fired powerplants.
- The federal government is saying domestic output
- 21 will increase 7.5 percent by 2015, 14 percent by 2020.
- 22 Canada is saying -- telling a similar story of continued
- 23 production from Canada in an environment where they're
- 24 making an effort to produce as opposed to sitting back and
- 25 doing nothing.

1 High volatile natural gas prices are a symptom of

- 2 a broken natural gas market not a problem with supply.
- 3 Thank you.
- 4 CHAIRPERSON GARAMENDI: Thank you very much, Mr.
- 5 Powers.
- 6 Mr. Cox.
- MR. COX: Hello. And thank you very much. My
- 8 name is Rory Cox. I'm the lead facilitator at the
- 9 Coalition of Ratepayers For Affordable Clean Energy or
- 10 RACE. This coalition is made up of over 20 community
- 11 groups representing communities from Baja, California to
- 12 Washington state. And as you can imagine, we are opposed
- 13 to this project and urge a no on the EIR.
- 14 The Cabrillo EIR states that LNG is necessary to
- 15 ensure a reliable alternative energy source. Yet the
- 16 Cabrillo Port Project will place the Pacific coast energy
- 17 grid at the mercy of global politics and international
- 18 stability. There is no guarantee -- the company often
- 19 touts the Australian gas field, but there's no guarantee
- 20 that this natural gas is going to come from those gas
- 21 fields. It has not been permitted and there is a growing
- 22 environmental movement opposed to that drilling.
- 23 So another possible source is Indonesia. Well,
- 24 in Indonesia, there are environmental and human rights
- 25 abuses associated with natural gas production and resource

- 1 extraction, and that's led to wide-spread discontent
- 2 especially on the Island of West Popua where separatist
- 3 tendencies run rampant. It's entirely possible that these
- 4 conditions will lead to LNG production being shut down or
- 5 interrupted or taken over by local forces. At the same
- 6 time, Indonesia has considered increasing LNG supply to
- 7 its Japanese and South Korean customers at the expense of
- 8 what they've promised to Sempra's Baja project.
- 9 So at the same time this is going on, the
- 10 countries that are already importing LNG are making higher
- 11 and higher prices for those LNG contracts. And China has
- 12 recently raised the bar quite high by setting the
- 13 benchmark price for natural gas in their country at \$6.30
- 14 an MBTU.
- 15 The natural gas producing countries realize that
- 16 they have a hot property on their hands and actually
- 17 today, they're meeting in Qatar to talk about this. The
- 18 countries that represent 70 percent of the world's natural
- 19 gas supplies are talking about forming a possible cartel
- 20 to set the price of LNG. So you can see that it is tying
- 21 ourselves to something that is less stable and more risky
- 22 and more volatile than what we already have. So given
- 23 these trends, it's pretty clear that this is a bad choice
- 24 for this region and for California.
- 25 CHAIRPERSON GARAMENDI: In your opening you said

- 1 that you represent those who are opposed to LNG up and
- 2 down the west coast from Washington to -- or Seattle to
- 3 Baja.
- 4 MR. COX: Washington state along the Columbia
- 5 River down to Baja, we represent communities that are
- 6 fighting LNG terminals along the coast. So that's, you
- 7 know, here in the Oxnard area, down in the Tijuana area
- 8 Ensenada.
- 9 CHAIRPERSON GARAMENDI: My question is -- I'm
- 10 aware of all of those. My question has to do with since
- 11 the EIR does not speak to the detail to those facilities
- 12 located north of the California border, would you please
- 13 give me a brief rundown of the status of those facilities?
- 14 MR. COX: They under the permitting process. I
- 15 believe Jordan Cove is going to file with the FERC over
- 16 the summer. And then the Northern Star project along the
- 17 Columbia River, I believe was a little farther ahead. I
- 18 don't know exactly where they're at. There are five
- 19 proposals, but two that are really first out of the gate
- 20 at this point. And those projects are largely driven by
- 21 California.
- 22 CHAIRPERSON GARAMENDI: Sorry, they are?
- 23 MR. COX: Largely driven by the California energy
- 24 market. Oregon doesn't need those projects.
- 25 CHAIRPERSON GARAMENDI: Thank you.